Just Another PR Tactic?: Discourse, Expertise, and Social
License in the “License to Farm” Campaign

by

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ABSTRACT

Social license is the need for, and attempt to, garner and maintain public approval of industry/corporate practices. The License to Farm campaign responds to the public pushback regarding industrial farm practices, and claims to educate the public on Canadian farming. In I analyze the campaign to reveal the discursive reproduction of power in the campaign materials. I seek to answer: How are representations of expertise employed to legitimize industrial farming as the dominant agricultural practice? The project relies on the science and technology studies framework and draws on critiques of industrial farming. I employ a mixed methodology that includes critical discourse analysis and Actor Network Theory. The project uncovers how the License to Farm campaign is less about educating the public and more of a public relations tactic (an iteration of the social license approach) used to negatively portray the critical consumer, and positively the proponents of industrial farming.

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Chapter 1: Introduction

In 2015, the Ontario government decided to heavily regulate neonicotinoids, a popular crop protection insecticide. The new regulation focused on reducing the use of neonicotinoid insecticide by 80% by 2017, and to ensure it is only being used on crops that demonstrate a pest problem (Ontario.ca, 2015). While the government claimed this policy was due to the probable link between neonicotinoids and a decreasing bee population (Ontario.ca, 2015), the increased regulation on neonicotinoids was widely seen as a “social license” effort on behalf of the provincial government (Menzies, 2015). Social license, discussed in greater detail in this thesis, is understood as the need for industries/corporations to garner and maintain public approval of industry/corporate practices (Prno & Slocombe, 2012). Increasingly, governments are also expected to maintain social license for their work. Because the Ontario public was so upset over the use of neonicotinoids, the provincial government had to act before they even had all the evidence (Menzies, 2015). There was such a strong public pushback against the use of neonicotinoids, the government clearly felt pressure to act quickly resulting in the regulation.

This example illustrates how social license can play a role in the agricultural industry. In this vein, my project looks at the use of a social license approach within a campaign titled License to Farm launched in 2016, as a means by proponents of industrial farming to shore up support for modern farming practices that are being questioned by Canadian consumers. The main finding of my project is that the License to Farm campaign was created in response to the public pushback against industrialized farming and for the purpose of reassuring consumers that industrial farming is safe.

I begin this chapter by outlining the background for my thesis where I frame my research question around the representation of expertise through the social license approach. I explain the

history of the notion of social license itself and how it began with mining operations but has since been extended across industries. In this project, the social license approach is being used in the Canadian agricultural industry, specifically in the License to Farm campaign, which addresses the agricultural sector. I also provide contextual information on the rise of industrial farming and its associated risks, and conclude with a discussion on alternative farming methods.

The thesis proceeds across four chapters exploring the License to Farm campaign and the documentary film that forms the core of the campaign. Chapter 2 focuses on my theoretical framework assembled through science and technology studies (STS) focusing on three perspectives: representations of expertise, the relationship between scientists and laypeople (non-experts), and the control of nature. This is followed by a brief description of my methodology and an in-depth explanation of my chosen methods, which include critical discourse analysis (CDA), Actor Network Theory (ANT), and content analysis (CA). CDA is employed as my primary method, which I use to unpack ideas of power, ideologies and discourse found within the texts of the License to Farm campaign. I then discuss how ANT and CA are productive methods for contextualizing my CDA.

In Chapter 3, I begin my analysis of the License to Farm campaign where I break down a prominent text—a documentary—and associated material such as a website, social media accounts and media objects like the #licensetofarm. Additionally, I provide speaker backgrounds of those presented in the documentary to reveal any hidden associations that could illustrate vested interests of supporting industrial corporate interests. Lastly, I provide a brief breakdown of the core funder of the documentary, SaskCanola, to demonstrate the values and focus of this industry association.

In Chapter 4, I interrogate my object of study, being the social license approach in the License to Farm campaign, through five constructs: representation of expertise, power relations, control of nature, construction of knowledge, and social license. Additionally, I address any constraints from my project and any areas needing further research.

Background

My research studies communication methods used by the agri-food industry through a case study of the public relations campaign, License to Farm. I examine how representations of expertise are employed to legitimize industrial farming as the dominant agricultural practice. Specifically, I ask of this campaign: **How are representations of expertise employed in the License to Farm messaging, and what types of farming and agricultural knowledge do they legitimize?** In line with CDA practices, I take a clear position in my project to call into question the reproduction of power through discourse, and therefore I do not claim to be objective. I state my position by employing three bodies of literature: STS which offers a critical perspective on the construction of knowledge, CDA to interrogate neoliberal ideals entrenched in agricultural cultural forms, and lastly critiques of industrial farming and its impacts, on which I draw to examine the material context of the campaign.

Principally, my project focuses on the campaign License to Farm, which consists of the *License to Farm* documentary, accompanying website and social media accounts (Facebook, Twitter, Instagram), all of which ostensibly aim to educate the public on the safety of industrial farming practices. The documentary addresses a problem of public mistrust in industrial farming practices. Released in January 2016, the documentary is a response to and addresses three broad public concerns over industrial farming, including pesticide use, genetically modified organisms (GMO) and the loss of small farming operations. The thirty-minute documentary features a

number of speakers, many whom are presented as experts, to educate the public on the safety of a certain type of farming. Indeed, the campaign refers to “farming” as a whole, but they only focus on industrial farming, thus marginalizing other farming practices.

The motivation for this study comes out of a pilot project I conducted during the summer of 2016 for the National Farmers Union (NFU) in Fredericton, NB. The NFU was looking to have some preliminary research done on the documentary and the speakers represented within it. The NFU mainly wanted to see if there was more than meets the eye with the agenda being promoted by this campaign. Based on the pilot project for the NFU, I arrived at a problematic: the License to Farm campaign was framed as an educational tool, but I wondered to what extent they were exploiting the notion of “social license” to try and appease people’s mistrust of industrial farming in order to continue public support for industrial practices.

Social License

The notion of social license is still relatively new, though it is quickly becoming a pervasive approach across industries. In particular, social license has largely been used to bring attention to the responsibility of companies to see and acknowledge the negative social/environmental implications of their practices (Pedro, Ayuk, Bodouroglou, Milligan, Ekins & Oberle, 2017). My project is situated in the broader context of how the social license approach, also known as social license to operate (SLO), is being employed by Canadian agricultural organizations. John Morison’s work (2014) describes how the term was in particular related to mining operations in Australia and Canada. The term emerged in the 1990s and is credited to international mining executive Jim Parsons. Since its emergence, social license has been growing in its prevalence and adoption across industries, including the agri-food sector

(Morrison, 2014). Indeed, it is widely argued that SLO can be understood and applied universally across industries (e.g. Franks & Cohen, 2012; Nelsen, 2006).

Social license is not a piece of paper nor a document such as a government license. Rather, it is social acceptance or approval of a company or project's consistent and continuous trustworthy behaviour. Once that is lost, the company or project no longer has a social license. At the most basic level, social license demands that corporate behaviour should not negatively impact human health or the environment (Gunningham, Kagan & Thornton, 2004). Indeed, a social license acknowledges that the private sector shares a responsibility with the government, which act on behalf of the society, to help "facilitate development of strong sustainable communities" (Williams & Martin, 2011, p.13).

There are various ways different fields and actors conceptualize the notion of social license, including ones that challenge this argument in stating that social license is a tool for civil society to control regulation (Murphy, 2017). Looking at the narrative of social license in mainstream media, we see it presented as a tool for civil society to use against corporations negatively impacting the environment and societies with their practices. However, it is also presented as difficult, and perhaps even impossible, to truly attain (Murphy, 2017).

Additionally, social license is conceptualized differently by policymakers. In academic literature, policymakers view social license as an opening of possibility through which to influence corporate behaviour (Gunningham et al., 2004). Yet, there is other evidence suggesting policymakers actually shy away in practice from the notion of social license because it is a vague term with unclear guidelines in its application (Lowey, 2014). Panelists who spoke at the 2014 Calgary symposium hosted by the University of Calgary School of Public Policy, discussed the elusive nature of social license and its varied use and application across sectors (Lowey, 2014;

see also Gunningham et al., 2004). In subsequent published work describing the symposium, Lowey addressed how social license can be used as an additional tool to the regulatory process to ensure organizations meet and maintain social approval alongside legal approval, given that industries face financial risks should they lose their social license (2014).

The policymakers' understanding of social license tends to reflect the mainstream media view, where the demands will continuously change once the original ones are met, effectively placing the control in the hands of civil society. What is clear from the limited literature on social license, is that there seems to be a lot of confusion around its proper application, who should be the one(s) to grant the social license, and whether or not it is a manipulative tool for civil society or a PR tactic for large corporations. What is clear, however, is that corporations lacking a social license, ought to take it seriously to avoid economic risks (Gunningham et al., 2004, p.309). An example of this is the agro-chemical giant Monsanto's failure to respond to public concerns over GMOs in Europe, which led to consumer backlash and a breakdown of public trust, which was significant enough to cause a rebranding of the corporation (Moore, 2001). The Monsanto example demonstrates the value of a social license when a powerful corporation had to make a branding decision to ensure they maintained public trust. This is no small feat, with Monsanto, which has since been bought out by Bayer, as the leading commercial seed and chemical corporation (Jasper, 2016).

It is very possible that while social license seems to be a novel idea, it instead is an evolution of similar terms such as 'reputation capital' and 'corporate social responsibility' (CSR). Although there is limited literature specifically focusing on social license, there is evidence showing it emerged from CSR scholarship and practice, since both deal with the negotiations with communities and other stakeholders regarding the costs and benefits associated

with industrial development (Pedro, et al., 2017; Hall, Lacey, Carr-Cornish & Dowd, 2015).

Therefore, it appears to be a fluid term that evolves with time, yet retains most of the values of its predecessors. This opens up the possibility of contrasting uses of the notion due to its multifaceted nature. Indeed, there is not one clear understanding of the term and there are multiple ways it has been applied, such as a marketing tool or a public demand to maintain responsible practices. Yet the concept of social license has indeed forced corporations/industry associations, mainly the ones that impact the environment, health or agriculture, to reinvent their image (Parsons & Moffat, 2014).

Parsons and Moffat, provide a glimpse into companies using social license as a PR tactic rather than its intended use; ensuring that governments, organizations, corporations, etc, are adhering to responsible environmental, and social practices rather than corporate interests. Similarly, authors Patel, Torres and Rosset (2005) mirror Parsons and Moffat's argument by exploring the evidence of public relations tactics used by corporations (like Monsanto) to shift public debates on issues concerning agriculture and biotechnologies. They discuss the PR tactics used by Monsanto by analyzing the debate on GMO crops. The authors argue that these tactics, such as portraying GMO crops as "the solution to hunger in the developing world," are often used to ensure economic factors such as profits or ensuring their power position within their industry sector (2005, p.434). Using social license as a PR tactic, Monsanto was able to discursively maneuver a justification of their control over our food system and GMO crops to make people accept the technology. This is not to say that Monsanto is the only culprit. In fact, in the United States alone, "the governmental bodies associated with the protection of the public interest have been under almost continual assault by corporations. In some case these attacks

have succeeded in removing yet another layer of protection against risks to public health and the environment” (Parsons & Moffat, 2005, p.435).

The rise of neoliberalism helped to entrench values and policies of privatization, deregulation and free market, which shifted governance more towards the private sector’s responsibility rather than solely the government’s. David Harvey’s definition of neoliberalism is very clear:

Neoliberalism is in the first instance a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices. (2007, p. 2)

The idea is that the state should only be involved in regulating things such as military, defense, police, and legal structures, but interventions that go beyond these functions are to be left to the private sector. Neoliberalism holds that the “social good will be maximized by maximizing the reach and frequency of market transactions, and it seeks to bring all human action into the domain of the market” (Harvey, 2007, p.3). Therefore, proponents of neoliberalism value the private sector’s ability to regulate itself and have the government be as little involved as possible. This means that industry has more freedom in how they conduct their corporate practices; that is, there is less democratic engagement involved in corporate decision-making and governance. Because of deregulation and privatization, there is a greater risk of corporations gaining monopoly power and garnering support for practices that are not necessarily in the public interest, but wholly in the corporate interest. These neoliberal ideals help to explain the pervasive use of social license because the state plays less of a role in regulating the market. This shift in governance makes demands of civil society to push for social license from

corporations and industry because the regulations are not coming from a formal political position but are guided foremost by the private sector. Additionally, company managers agree that not meeting the requirements of the social license “will ultimately result in increased regulation or greater economic costs to the company” (Gunningham et al., 2004, p. 336). This effectively places a lot of power in the hands of the public to ensure companies are compliant with safe practices.

With “social license” itself being an intangible notion, its use and purpose can become somewhat elusive (Gunningham et al., 2004; Lowey, 2014). Pedro et al. (2017) critique the notion itself by discussing how the “social license” framework is deficient. This is because the agenda of “social license” is limited to accommodating community demands only to the minimum extent necessary (Pedro et al., 2017). By meeting the minimum demands, companies are seemingly playing a balancing act of avoiding too much public opposition and social conflict with the “associated costs of reputational damage and operational delays or disruption” (Pedro et al., 2017, p. 155). The use of the social license has produced confusion amongst industries, due to its ambiguous nature.

Indeed, in the limited literature on social license, there are a number of studies that focus on the use of social license as a risk management tactic by companies (Gunningham et al., 2004). It is useful to see how corporations/industry associations can adapt the discourse to appease people’s concerns, all the while maintaining the same controversial practices. This literature coincides with my problematic where I am looking to see whether or not the campaign is employing the social license approach as yet another public relations tactic (PR) used to appease societal concerns without making socially beneficial changes. For instance, social license from business, industry and marketing perspectives is described explicitly as a risk management tool

(Gunninghman et al., 2004). In this literature, social license is perceived as a tool to help companies stay profitable, while still maintaining similar practices to those that are being questioned and challenged. This is due to the increasing demands and expectations societies have of corporations/industry associations. Parsons and Moffat argue that even though these corporations/industry associations face growing pressures from society to gain a social license, they sometimes simply alter the discourse used, in their favour, in order to continue their practices while seemingly having addressed the issue of public mistrust (2014). Furthermore, actions that go beyond the minimum demands are often so because of potential increase in profits (as cited in Porter & Van der Linde, 1995). Prno et al. (2014) further illustrate this in stating, “corporate social responsibility initiatives are arguably the most utilized market-oriented tools for obtaining a social license to operate” (p.352).

The modern food system is a complex, multilayered system. But, of course, it has not always operated that way. I next turn to the historical context of industrial agriculture.

The Rise of Industrial Farming

The current dominant mode of food production is industrial: large scale, commodity farming for export, rather than family and community sustenance. The agri-food industry is adopting the social license approach in relation to industrial farming methods, which have come under scrutiny as publics have been made increasingly aware of their numerous environmental and health risks (Horrigan, Lawrence, & Walker, 2002). Therefore, it is useful to review how industrial farming came under wide public criticism, which then evolved into a call for social license in this particular industry.

The industrial era can be broken up into the era of expansion and the era of abundance. In the era of expansion in the late 1700s and early 1800s, we start to see the distancing between

food and society due to the production of a market for bought food because of a new set of city labourers, the industrial class (Tannahill, 1973). The industrial era used mass production of technologies but also of food (Tannahill, 1973). Indeed, as Tannahill states, “by the 1850s... an increase number of laborers had to be furnished with more food more cheaply” (Tannahill, 1973 p.306). It was an era of mechanization where human labour was being replaced by machinery, such as ploughs and seed drills, as a strategy to improve efficiency (Tannahill, 1973). This meant faster rates of producing food since with machines humans could accomplish more in a day than they had ever before.

The industrial era brought with it many changes, including more people moving into up-and-coming cities (Cronon, 1991), with fewer people working the land to produce their food, and increasingly relying on other producers to supply their food. Of course, transportation was needed for this, which was made easier with the advent of the steam engine and rail transportation. The railway, along with helping to make transportation of goods much easier, was able to travel across longer distances (Tannahill, 1973). With rail transportation, meat carcasses could be safely transported, without fear of them going bad, which was the risk when it was previously transported on hoof (Tannahill, 1973). Moreover, the advent of modern refrigeration techniques such as chilling or ice storage by evaporating or compressing the air in ice houses (1870s) made room for food to easily be transported across distances without fear of it going bad along the journey (Tannahill, 1973). Furthermore, the railways allowed for the establishment of trans-oceanic trade with links between farm and seaports (Tannahill, 1973). Moreover, canning was also developed as an early preservation technology, further assisting in the preservation of food. The First and Second World Wars, streamlined the development of chemical preservatives to further help in the preservation of food. The rail, canning, chemical preservatives, could be

considered technologies of expansion because they worked to distance society from the production of food. Societies now having faster ways to produce food as well and preserve it, led to the era of abundance (Tannahill, 1973).

In the later part of the 1800s, the era of abundance transformed farmland (Tannahill, 1973), specifically with technological advances and shifts in consumer behaviour that led to more intensive agricultural production and more livestock agriculture. “With a vast and expanding market for the meats of commerce, it was not surprising that there should have been an international boom in livestock farming” (Tannahill, 1973, p.316). The goal of productivity was now introduced into our food system (Tannahill, 1973). Along with the boom in livestock farming, production of corn and wheat expanded as well. Monocrops were introduced, where farms now only had one cash crop rather than a variety of produce growing (Tannahill, 1973). In the mid-20th century, technologies such as hybrid seeds, which are seeds produced by cross pollinating, were used to try to boost yields. With hybrid seeds and the Green Revolution, farming truly became large-scale, with goals focused on efficiency, productivity and economic or business gain (Shiva, 2000). The Green Revolution, a term that first surfaced in 1968, was essentially the transfer of agricultural technologies, like hybrid seeds developed to produce more yield, to the global south (Shiva, 2000). Prior to the Green Revolution, technologies like hybrid seeds, mechanization of agriculture, irrigation systems, etc., were largely only seen in industrialized countries. Though there were many involved in the process that led to the Green Revolution, it is Norman Borlaug, who was credited as the ‘father of the Green Revolution’. Borlaug was seen as saving large populations from starvation, and even won a Nobel Peace Prize for his efforts in 1970 (Shiva, 2000). However, the Green Revolution, quickly produces socio economic disparities. Because of its adoption in poorer countries like India, the gap between the

rich and the poor grew exponentially; the costs associated with the crop irrigation, the chemical use needed and the mechanization of the whole system, many smaller farmers went into severe debt or bankruptcy. Moreover, there was even a serious increase in suicide and violence that ensued because farmers could no longer make a living and were run out of what had been their livelihood (Shiva, 2000). Of course, the chemical corporations benefitted greatly from the global souths need for more crop protection (Shiva, 2000). Additionally, the Green Revolution introduced monocrops to the global south, which affected biodiversity, as fewer varieties were planted, and more single crops were planted on larger scales (Shiva, 2000). Monocrops and biotechnologies also encouraged larger farming operations, so that in Canada alone, since 1941, the number of farms has decreased by some 75% while the size of the average farm has increased fourfold (Statistics Canada, 2017). However, during the same period the value of farm equipment has grown nearly tenfold.

The modern industrial food system values productivity, efficiency, and profitability. These principles align closely with neoliberal values, making modern agriculture a political economy project. The political nature of it has led some analysts to describe the arrangements in the agri-food systems as “food regimes” (Friedmann, 1987; Friedmann & McMichael 1989). With the post-war era, North America now sees foods that are more chemically produced, industrially packaged and commercially shipped over long distances (Tannahill, 1973). It is common in our food system for consumers to not know where our food is coming from. Through “distancing,” (Tannahill, 1973) made possible with the industrial era, there is now a gap between the production and consumption of food. Additionally, Brewster Kneen, a foundational thinker in critical food studies perspectives describes the distancing we now see in the food industry (1993). Knezevic discusses Kneen’s ideas on distancing where she states,

... consumers' purchasing decisions are informed mainly through the labels on the packaging. Without any connection to the field or the farmer who produced the food, consumers are prompted to associate their food with brands, such as the friendly faces of Aunt Jemima and the Pillsbury Doughboy. They are also prompted to rely on the labels to tell them how one product can be a better choice than the next, and to assure them that the product meets some set of standards of quality and safety. The industrial food system depends on these messages to communicate with consumers and provide them with a sense of trust and reassurance. It also depends on them to maintain the distancing without major objections (Knezevic, 2012, p.249).

Farming is done on such a large-scale and transported all over the world, that people do not have that close relationship with the food they consume like they once had and indeed have less food literacy, or knowledge about production and preparation of food (Kneen, 1993; Knezevic, 2012; Nestle, 2002). That distance allows for less transparency in food production methods, more technologies for preserving over long distances, which in turn lead to what we are now seeing with farming and social license; a public that is so far removed from the food they eat and even less food literate, blurring the production processes of food, and questionable practices to be better veiled. Food packaging like Aunt Jemima is not value free but rather an effort by the food industry to make the consumer feel as if they know where their food comes from.

There is a public pushback against the large agricultural corporations that grew powerful through the industrialization of farming and against their technology-led practices of food production. As science and technology studies (STS) scholars argue, there are unintended consequences with the application every technology. These are consequences that are not necessarily foreseen when innovations are first applied, often coming out of technologies that were meant to help. In the case of our food systems, what was once thought of as technologies to help preserve and protect foods like preservatives and pesticides, are now being challenged for their harmful effects on human health and the environment (Patel et al., 2005). Technologies

such as hybrid seeds that were applied to help bring people (especially in the global south) out of poverty, are now recognized to have furthered corporate concentration in the food system, reduced farm incomes and led to rural community erosion (Clapp, 2012; Shiva, 2000).

The Impact of Industrial Farming

To understand the claims of the License to Farm campaign, and in particular the documentary, makes on modern farming practices. The rise of industrial farming and the impact of industrial farming sections are contextually important. Though industrial farming has increased the amount of food grown and boosted farming production efficiency, it is not without environmental impacts. Indeed, industrial farming has been linked to a number of negative environmental realities such as soil erosion, loss of biodiversity, excessive use of water, air pollution, and so on (Clapp, 2012; Shiva, 2000; Harper & Le Beau, 2003).

Soil erosion is a process that takes place when the soil lacks sufficient nutrients for optimal plant growth. In nature, the soil slowly replenishes its nutrients and minerals when the plant growth dies off and decomposes, and its organic matter is returned to the soil (Harper & Le Beau, 2003). Industrial farming practices increase the rate of soil erosion because they do not allow for the nutrients and minerals to return to the soil. This leads to the soil's reduced ability to retain moisture, carrying away nutrients and minerals, degrading the physical components of the soil, such as its porosity, and causing an uneven soil loss, making crop management less efficient (Harper & Le Beau, 2003, p.167). In nature, wind and running water are the main causes of soil erosion, but with industrial farming practices, scientists have estimated that worldwide soil erosion rates are 20 to 100 times the natural rate (Harper & Le Beau, 2003). Industrial farming practices are done at such high volumes and frequency that the natural processes, such as nutrient recycling from deteriorating organisms back into the soil which is a slow process, cannot keep

up, meaning the negative impacts are gradually accumulating. Rather than asking, How ought we reduce this impact? proponents of industrial farming are seemingly asking what technologies can we develop to delay the impact a little longer. Yet, this is not sustainable and only provides a temporary fix, which sooner or later is likely to produce its own negative impacts. An example of this would be chemical pollution that has accumulated because of practices like monocrops, which lead to a loss of biodiversity and thus require more chemical interventions. The UN recently reported that agricultural chemicals have had “catastrophic impacts on the environment, human health and society as a whole” (Carrington, 2017).

As humans occupy and control more and more of the planet, the diversity of living things is diminishing because their habitats are being destroyed (Harper & Le Beau, 2003, Kleinman & Suryanarayanan, 2013). Additionally, historically, humans used thousands of different plant species for food, and that has now been mainly reduced to twenty (Harper & Le Beau, 2003). For example, India once had 30,000 varieties of rice, but today most production comes from a mere ten (Harper & Le Beau, 2003). Moreover, in the late 1800s there were more than a hundred varieties of apples grown, yet today in our supermarkets, we see maybe six (Harper & Le Beau, 2003). Biodiversity is important to sustain wildlife, which in turn helps to sustain crops. The heavy adoption of monocrops allows for less biodiversity than a multi crops field would, which would in turn help control pest and bugs infestation because there is more of a balance and less of a chance for a single pest/bugs domination. Subsequently, less chemical use would be needed since the bugs would act as the fertilizer. Moreover, bees have played a big role in pollinating and maintaining healthy biodiversity, by estimating that they have pollinated so much as trillions of blossoms in one summer day (Harper & Le Beau, 2003). However, because of heavy use of chemical pesticides, bee populations have steadily decreased since 1979 (Harper & Le Beau,

2003, Kleinman & Suryanarayanan, 2013). With the growing amount of farm land used, industrial farming also impacts the water supply at a faster rate than it can naturally replace itself.

The use of water in agriculture accounts for 70% of the world's potable water (Harper & Le Beau, 2003). The excess use of water is a growing concern for governments around the globe. When looking at how many liters of water it takes to grow food, Harper and Le Beau (2003) present a chart, which demonstrates that for every kilogram (2.2 pounds) of beef, 100 000 liters of water is used (Harper & Le Beau, 2003, p.170). Moreover, 70 to 80% of that is lost by runoff, evaporation or seeping into the ground before reaching the crops (Harper & Le Beau, 2003). Therefore, water is being wasted at an alarming rate. As a result, many farmers have opted for groundwater, which is stored in underground formations called aquifers (Harper & Le Beau, 2003). However, because groundwater often supplies rivers, lakes, wetlands, there has been a drastic loss of these resources. "Lakes are shrinking, wetlands are disappearing, and rivers are often reduces to trickles" (Harper & Le Beau, 2003, p.170). As Harper and Le Beau state, "groundwater is being pumped four times its replacement rate" and it is not a stretch to imagine that figure has increased since the publication of their book in 2003. Along with reducing our water supply, industrial farming has also had significant impact on the atmosphere through air pollution.

The chemical use of today's industrial farms and animal waste, has had negative impacts on the ecosystem at large. Toxic chemicals from these materials have accumulated and affected wildlife and contributed to global warming. "Inorganic fertilizer and animal wastes leave large concentrations of nitrates, phosphates, and microorganisms from animal wastes that wash into streams, rivers, lakes and groundwater" (Harper & Le Beau, 2003, p.175). This bioaccumulation,

affects algae growth in bodies of water, which essentially suffocates them through a process called *Cultural eutrophication* by choking all its oxygen (Harper & Le Beau, 2003). Therefore, organisms are dying off and the balance of the ecosystem is severely affected.

Moreover, the use non-organic crop protection like herbicides, pesticides, insecticides, does not necessarily help reduce the incidence of diseases, weeds and pests. Rather, what tends to happen is that these organisms adapt and develop resistance to these products making them harder to control (Harper & Le Beau, 2003, Kleinman & Suryanarayanan, 2013).

Alternative Farming Practices

In the License to Farm campaign, farming is discussed only in the form of industrial farming practices. It is presented as being efficient, sustainable, and environmentally friendly. However, agroecological practices are an alternative way of farming that has great potential for both the environment and yield. The International Panel of Experts on Sustainable Food Systems' (IPES) report, entitled "From Uniformity to Diversity," notes agroecological farming as "the science of applying ecological concepts and principles to the design and management of sustainable food systems" (Frison, 2016, p.11). Furthermore, this type of farming "encompasses various approaches to maximize biodiversity and stimulate interactions between different plants and species, as part of holistic strategies to build long-term fertility, healthy agro-ecosystems and secure livelihoods" (Frison, 2016, p.11). Adopting an agroecological method to farming re-introduces a wide range of species that industrial farming practices tend to exclude. Inter-cropping or multispecies methods create room for different species to be planted in the same field and allow for direct interaction between different varieties/species, creating more biodiversity. The benefits of agroecological practices go beyond increasing biodiversity and touch on multiple environmental and social benefits. For example, when considering yield,

studies show that multispecies assemblages produced 15% higher outputs than monocultures and that less land was required to produce in polycultures than to produce the same amount of food in monocultures (Frison, 2016).

Furthermore, there are also positive socio-economic impacts associated with ecological farming. For example, by introducing organic fertilizers and creating more biodiversity, farmers are less reliant of costly external inputs such as in-organic crop protection like herbicides, pesticides, and insecticides (Frison, 2016). As well, there are health benefits to farm labourers and consumers of not being overexposed to harmful chemicals used in industrial crop protection (Frison, 2016). Additionally, agroecological systems are more labour intensive, and because of the complexities of managing different plants/animals and recycling waste, employment opportunities increase (Frison, 2016). Agroecological farming practices are growing in prevalence and present significant opportunities for sustainable food production. However, the License to Farm campaign never discusses any other farming practice other than organic farming, and even then, it is only discussed as a lesser productive and sustainable farming practice to industrial farming.

In the next chapter, I outline the theoretical framework and methodology guiding my analysis. In combining my framework of science and technology studies along with some foundational approaches in content and discourse analysis to critique representations of knowledge and expertise, I assemble a clear methodology through which to analyze the License to Farm campaign, and wider concerns around its role in public relations practices within industrial farming.

Chapter 2: Theoretical Framework & Methodology

Theoretical Framework

In the preceding chapter, I reviewed the origins of both the social license and industrial farming to situate my work within a wider social and historical context. Theoretically, however, I turn to well-developed bodies of critical literature that can provide conceptual insights into how the social license approach constructs knowledge. I employ an STS framework to explore my research question: How are representations of expertise employed in the License to Farm messaging, and what types of farming and agricultural knowledge do they legitimize?

As a field, STS was developed in the late twentieth century (Hackett, Amsterdamska, Lynch, Wacjman, 2008). Its main area of focus is the relationship between society and the production/development of scientific knowledge and technology. A key tenet of the STS field is that the production of scientific knowledge is a social process that cannot be separated from the social context (Latour & Woolgar, 1986). STS focuses on many areas of the relationship between society and science/technology, but for the purposes of this project, I have emphasized three particular areas: the critical examination of the link between automatic authority for scientists with its coincident claims of value-neutrality, the relationship between experts and laypeople, and the critique of human control over nature. STS does not reject science, rather it allows for a better understanding of its practices and the social aspects that are inherent in its construction of knowledge.

Representations of Expertise

In relation to representations of expertise, an STS framework helps to articulate how expertise is constructed in the text I am studying by looking at the role that notions of objectivity and scientific authority have in producing facts and truths (Latour & Woolgar, 1986;

Latour & Woolgar, 1979). STS proponents dispute perceived notion of expertise and its association with automatic authority. Unlike the dominant conception of scientific expertise as value-neutral and divorced from social influences, the idea that scientific knowledge is socially constructed because facts are contingently real, is a tenet of STS. Bruno Latour and Steven Woolgar's *Laboratory Life* (1986) exemplifies this argument. In this widely known work, Latour and Woolgar address the production of facts by observing lab work in an anthropological study at the Salk Institute. Latour and Woolgar demonstrate how "an important feature of fact construction is the process whereby 'social' factors disappear once a fact is established" (Latour & Woolgar, 1986, p.23). In addition, the authors examine how the elimination of alternative interpretations of scientific data and consequently the rendering of these alternatives as less probable, are a central characteristic of scientific activity (Latour & Woolgar, 1986). Indeed, the authors state, "consequently, the practicing scientist is likely to be as much involved with the task of producing ordered and plausible accounts out of a mass of disordered observations as is the outside observer" (p.36).

These ideas are reflected in Thomas Kuhn's revolutionary book *The Structure of Scientific Revolutions* (1962). Kuhn exposes the fallacy of the idea that science operates outside of social forces. Instead, he posits, it is social agreement and convention which drive the production of facts and consensus on truths. Kuhn argues that scientific knowledge is produced from within the lens of a particular paradigm or worldview (1962). Moreover, these paradigms fit into periods of "normal science," which is described as a period where the paradigm is intact and relatively unchallenged (Kuhn, 1962). Eventually, the anomalies, which have been accumulated but pushed aside throughout this period of "normal science," create a paradigm shift into a new world view caused by the acceptance and analysis of the numerous anomalies (Kuhn,

1962). Production of knowledge is a social activity and therefore, should not be taken for granted as the ultimate truth or the only source of authority even in matters relating to science.

In examining representations of expertise, it is very relevant to understand the social production of facts. As Latour and Woolgar state, “specific interests in laboratory life concerns the way in which the daily activities of working scientists lead to the construction of facts” (1986, p.40). Facts are constructed through a social process and are intermingled with vested interests that are not often made apparent to non-scientists. Yet the dominant view on facts is that they are out there in nature to be found and scientists merely do the work to find and make sense of them, rather than create them (Latour & Woolgar, 1986).

Summerson Carr discusses expertise as it relates to the STS view on science and fact (2010). Carr explores how societies recognize expertise itself and the practices that constitute expertise. Carr argues that expertise is not something someone *has* but something someone *does*. She looks at how expertise gets constructed through language (jargon/acronyms) and visuals (gestures/uniforms) (2010). Carr’s work looks at ideals associated with notions of scientific training, such as the strict culture around the time and training required, and how expertise becomes represented in societies (e.g. gestures, jargon, appearance). The notion of ‘black box’ is useful to define here to contextualize the construction of notions like expertise. I draw on Graham Harman’s use of the term in *The Prince of Networks* where he states, “a black box is any [object] so firmly established that we are able to take its interior for granted. The internal properties of a black box do not count as long as we are concerned only with its input output” (Harman, 2009, p.33). When looking at controversies, the STS framework is less interested in figuring out which side wins, but rather endeavors to unpack what the controversial arguments are and where they come from. That is to say, STS proponents attempt to open the ‘black box’ of

a controversy to paint a full picture of the situation and reveal hidden and vested interests.

Indeed, Sheila Jasanoff, an accomplished STS scholar, emphasizes this by highlighting a benefit of an STS approach in her work on science's role in public policy:

The STS approach to controversy symmetrically examines the foundations for both true and false beliefs, asking how people arrived at judgments about the rightness or wrongness of particular facts. This method of interrogation can be extremely informative because it illuminates the nooks and crannies where beliefs are put together, revealing underlying, possibly unarticulated, normative assumptions, as well as tacit models of nature and society, whose validity may never have been tested. (p.67)

For my project, it is important to understand the social processes that take place and are interwoven in the production of scientific knowledge. Understanding scientific knowledge as social process, additionally acknowledges it as value-laden. Therefore, science and its patrons should not be held up on a pedestal such that we forget it is inherently a social activity. This positions my critical lens on the use of expertise to legitimize industrial farming practices.

An STS perspective allows me to open the black box on the notion of expertise and understand its social and performative aspects, being what one does or practices, as oppose to one's possession of facts or expertise (Hackett et al., 2008, p.610; Carr, 2010). Examples of the studies informed by this view are Alan Irwin's book (1995) *Citizen Science: A study of people, expertise, and sustainable development* and Kelly Bronson's article "Reflecting on the Science in Science communication" (2014). Irwin's book looks at exploring the relationship between science and society, specifically in relation to environmental threats (1995). Irwin looks at how issues, like environmental ones, are addressed by scientists and citizens (1995). Irwin demonstrates how the public is often perceived as ignorant by scientists when it comes to environmental controversies. Therefore, it is commonly thought that scientists/experts must be the ones to inform citizens (1995). Irwin tries to challenge this normative frame in hopes to make

people rethink the roles associated in the relationship between science and the public (1995).

Irwin's ideas are relevant for this project as they address how the general public perceives the relationship between scientists and citizens. This is important in order to be able to address how representations of expertise can legitimize certain kinds of knowledge and in turn practices informed by this knowledge.

While Irwin's book takes a closer look at the relationship between people and science, Kelly Bronson's article on GMO patent disputes, takes a closer look at the production of scientific knowledge and the value that is embedded within that form of knowledge. Bronson demonstrates that applying an STS perspective can reveal how certain kinds of knowledge and expertise (scientific knowledge) are legitimized over other kinds, such as laypeople's (non-credentialed and local knowledge) (2014). Bronson article, focuses on the lawsuit between Monsanto and the Saskatchewan farmer Percy Schmeiser, and draws attention to how Monsanto's use of dominant logics of science, which privileges particular ways of knowing and certain types of knowledge, were viewed as more valuable in building a credible case than Schmeiser's local knowledge.

These authors contextualize the idea of certain embedded values being privileged by particular knowledge, namely scientific knowledge. This is in part produced through the assumptions around science widely held in Western culture and which are thus used strategically by large corporations and organizations to persuade the public. This pattern is also found in my research through my analysis of the License to Farm campaign, and employing an STS lens framework allows me to uncover any underlying values or vested interests that may be hidden under the veil of the "social license" approach. STS's position on the social context for scientific knowledge permits me to analyze science and expertise as part of the social and not removed

from it. Indeed, an STS lens acknowledges the complexities within the production of scientific knowledge and begins to blur the dominant understandings of science as only producing truths. This blurring turns us toward other questions: if science is a social progress, why is it valued over other kinds of knowledge? Is there room to value experience and local knowledge just as much? Arguably, there is, and as I explore in the next section, the tensions between local knowledge and scientists provides an important understanding in the context of my research.

The Relationship Between Laypeople and Scientists

Michel Callon writes about the role of laypeople¹ in the production of scientific knowledge and outlines three models; 1) The Public Education Model, 2) The Public Debate Model, 3) and, The Co-production of Knowledge Model. These models address the different ways to understand and view the relationship between science and laypeople. The first model focuses on understanding the public as being ignorant of scientific knowledge and needing to be educated by scientists (Callon, 1999). It assumes public concerns and debates that arise involving science are irrational and clouded by emotions (Callon, 1999). Model 1 upholds scientific knowledge as the most valued type of knowledge and makes no room for deliberation between laypeople and scientist. Laypeople are largely perceived to add no value to scientific debates. Indeed, interactions between scientists and laypeople are predominantly one sided with the sole goal being to inform and educate the public.

The second model, the public debate model, positions laypeople as having a deeper understanding of scientific knowledge and makes room for public deliberations on scientific issues (Callon. 1999). In this model, experience of an individual can be valued as a particular

¹ Given the religious origin of the word “lay” and the many ways it can be interpreted, I considered using “non-professionals” in lieu of “laypeople”, but because this is a term that has often been used in STS literature, and STS being my theoretical framework I chose to continue using the term “laypeople.”

expertise, even if not scientific. This model works from the assumption that “science produced in laboratories is at best incomplete, at worst unrealistic and, in any event, incapable of accounting for the complexities of the specific problems to which it is applied” (Callon, 1999, p.86). There are many examples in literature that demonstrate the unique knowledge a layperson might possess over the expert/scientist, Brian Wynne’s classic study of sheep farming (1986, cited in Callon, 1999) being one of them. Callon discusses Brian Wynne’s book on risk management regulations and standards on hazardous waste as another example, speaking to the importance of negotiations between scientists and laypeople (cited in Callon, 1999). Wynne analyses the interactions between shepherds living near a nuclear plant and the specialists responsible for monitoring the impacts of nuclear fallout (cited in Callon, 1999). What his analysis showed is that specialized knowledge from experts was not enough in understanding the world in which the shepherds and their sheep lived in. The outside experts had only partial understandings of the particular farming land, and it was the shepherds who possessed far more extensive local understandings through their experience. Indeed, in the public debate model, value is placed on the idea that a layperson can create enriched conditions through means only found in the layperson’s experience (Callon 1999).

Lastly, the third model is the co-production of knowledge model. In this model, the layperson’s role in the production of knowledge is not only taken into consideration but is *essential* (Callon, 1999). Indeed, Callon states, “it is possible, in this model, to talk of collective learning, since the different knowledge is mutually enriching production throughout the process of its co-production” (1999, p.91). The value here, is placed on both the experts and the layperson. Unfortunately, though this model is more ideal, it is not the dominant perspective. As Callon states, “the legitimacy of this common enterprise, through which new knowledge and new

identities are jointly created, relies entirely on the ability of the concerned groups to gain recognition for their actions” (1999, p.92).

While Model 3 may be ideal, it is model 1, the public education model, that Western society predominantly abides by. The general consensus is that scientific knowledge is the most valuable knowledge to obtain and is generally only held by those accredited in scientific fields and not by laypeople. There is a perception that laypeople’s traditional knowledge gained through lived experiences, does not merit the same value as scientific knowledge. As such, scientific knowledge continues to be upheld and valued above all else, leaving no room for diverse knowledge bases to interact and build off each other as model 3 suggest. The dominance of model 1 allows for actors to exploit scientific knowledge, say during environmental or other controversies involving science and technology, in order to support their corporate interests.

The Control of Nature

The third STS-related concept my project considers is that of the control of nature. This section is largely informed by Carolyn Merchant’s work in her monograph *The Death of Nature* as well as selections from Donna Haraway’s considerable scholarly contributions in this area. A key part of this project looks at the use of the social license approach, and it makes sense to look at the root of the controversy the social license approach has sparked; namely, the industrial farming debate.

Merchant’s chapter, “Dominion over Nature,” looks back to the beginning of modern science and the work of Francis Bacon, a natural philosopher who is identified as the ‘father’ of modern science (1989). In the 17th century, Bacon, as Merchant explains, fashioned a new ethic sanctioning the exploitation of nature (1989). Bacon put forth the idea of nature as a machine, which in turn made nature into something to manipulate. Bacon advocated for the manipulation

of nature in order to control it and have it reveal its secrets for human benefit (Merchant, 1989). My project examines how the rise of industrial farming flows from this idea of nature as a machine. Merchant focuses on Bacon shifting the perception of nature in the 17th century, to one of nature as a threat; an “us versus them” (or “us versus it”) situation (1989). Indeed, the beginning of modern science is also seen as the beginning of viewing nature as bad and in need of control.

Bacon’s methods in advocating for this new mechanistic approach was to apply imagery used to describe women, to also describe nature. Francis Bacon lived at a time when women were widely seen as inferior to men and scientists and the general public, would adopt his idea to see nature as, like women, able to be manipulated and controlled (Merchant, 1989). In the 17th century, the notion of women being manipulated and controlled was a social standard and thus Bacon appealed to these standards, to change people’s perception of nature. It is the consequences of these ideas that are of most significance. As Merchant notes, the consequences of these ideas are found today in the global environmental crisis. The way we talk and perceive a particular thing such as nature, affects people’s relationship with it. Seeing nature as in need of control places risk on the environment because humans predominantly view any intervention as positive for human benefit while not necessarily considering the extent of the environmental impacts associated with those interventions. The Dichlorodiphenyltrichloroethane (DDT) example Rachel Carson discusses in *Silent Spring* (1962) is a perfect example of this. When scientists were testing the chemical to help kill weeds, they were not necessarily asking the question What about bio accumulation? but were rather trying to see what amount would be safe enough to kill weeds but not be a danger to other living things.

Similarly, Haraway's work in her chapter "Otherwordly Conversation; Terrain Topics; Local Terms" (2004), is in dialogue with Merchant's discussion on the control of nature. Here, Haraway discusses how we need to change our relationship with nature and how we perceive it stating that "we must find another relationship to nature besides reification, possession, appropriation and nostalgia... Immense resources have been expended to stabilize and materialize nature, to police its/her boundaries" (Haraway, 2004, p.126). Throughout the centuries since the birth of modern science, humans have depleted finite resources to pursue embedded values (e.g. oil industry), and such is the case with industrial farming. In the case study used in my project, the social license approach is in place in part because of a pushback against the Baconian view of a mechanical nature. The ways people have spoken about nature, and treated resources found in nature, can be linked to environmental crises such as the depleting ozone layer. For instance, there are many studies that show how the methane from cows alone, causes significant pollution and damage to our atmosphere (Miller et al., 2013).

Furthermore, as mentioned above, industrial farming has been linked to other negative environmental impacts such as soil erosion, excessive use of water, air pollution, and loss of biodiversity (Harper & Le Beau, 2003). Yet, as Haraway points out "it may all boil down to a form of anthropocentric colonizing, where everything and everyone is still being measured by a human and western yardstick" (Haraway, 2004, p.141). The public's concern illuminates the issues with the control of nature is out there, but the knowledge of the public is not what becomes the dominant narrative. A particular type of knowledge, namely scientific, is valued over that of laypeople.

Methodology

My project is a case study of the License to Farm campaign through a qualitative approach. I look at this campaign with the tools of critical discourse analysis (CDA), Actor Network Theory (ANT), and content analysis (CA). These methods are employed to uncover and contextualize any possible patterns of speech that reveal representations of expertise as acts of legitimization.

Data Collection

My data collection took place in two stages. First, the main part of my data consists of campaign materials and includes the documentary *License to Farm*, the accompanying website and the campaign social media accounts. I took screenshots of the “About”, “Get Involved”, “Resources”, “Connect” and “Testimonials” page of licensetofarm.com, while omitting pages like “Contact us.” These five pages discuss background information, sponsors of the documentary, ways in which people can spread the campaign message through social media platforms, and resources like “screening in a box.”

The second part of my data collection involved gathering information about the core funder of the documentary, SaskCanola, which provided \$150, 000 of the \$200,000 project (Allen, January 20, 2016). I took screenshots of what SaskCanola’s industry focus is including their partners, their mission, and their funding because SaskCanola is the major financial contributor of the *License to Farm* documentary and it is imperative to get a sense of where this organization’s agricultural values lie. Uncovering these values can help contextualize the problematic I have observed in the pilot project, which is that this campaign is employing social license as a public relations (PR) tactic to maintain industrial farming as the dominant agricultural practice.

Data Analysis

As this is a critical examination of the employment of “social license” in the License to Farm campaign, it is crucial to choose methods that will make it possible to reveal the values and interests behind “social license”. Therefore, I rely on three complementary methods of analysis for my project, which I discuss in relation to one another as they inform each other. There are benefits in applying multiple methods and my aim is to consider my data in more than one analytical manner for greater rigour and trustworthiness of my findings (Golafshani, 2003).

The main method of analysis that I apply is critical discourse analysis (CDA). The CDA approach allows for the unveiling of vested interests that may lurk underneath the value statements and perspective promoted in the License to Farm campaign. Indeed, my focus is to analyze whether this campaign is exploiting its use of “social license” to secure industrial practices. As discussed in more detail in the following section, CDA allows me to explore the License to Farm message to better analyze its discourse, ideology, and power (tenets of CDA), which are seemingly reproduced through the campaign’s narrative as part of the “social license” approach.

The second method I have selected is Actor Network Theory (ANT). In spite of its use of ‘theory’ in the name, is much more a method to uncover or disclose how actors (humans) and actants (non-humans) are allied in a network (the campaign), which together reproduces and reinforces dominant ideologies. ANT helps to illustrate the broader reach of this campaign by including non-human actors, which is a key tenet of ANT. There are human actors that present a particular message in the *License to Farm* documentary, however, the actor-network approach enables me to consider how the aesthetic included in the documentary, for example the clothing, back drops, and so on, as well as the website and associated resources (such as the social media

accounts using the hashtag #Licensetofarm) are all allied as a network and all play a role in securing a dominant understanding of the campaign.

Lastly, I employ content analysis (CA) to the documentary itself to track patterns I discuss as part of my CDA. CA is employed purely to quantify these patterns and narratives that are further interpreted through CDA. In contrast to CDA that relies on in-depth interpretation, CA provides higher-level findings, such as number of times specific terms or narratives, such as “fear” or discussions of industrial farming as positive, appear and could be seen as promoting vested interest towards favouring industrial farming above other farming practices. Each of these methods is discussed in more detail in the following sections.

Critical Discourse Analysis

I am using the critical discourse analysis (CDA) method to examine and critically analyze how power relations are produced, and reproduced, in the documentary in relation to representations of expertise. Specifically, I use CDA to show how expertise in the documentary is used to legitimize industrial farming and reinforce the ideology of the status quo (Coulthard & Caldas-Coulthard, 1996; Fairclough, 2013; Van Dijk, 2008; Wodak & Meyer, 2009). My project considers how this campaign uses the social license approach, and then act from positions of power that use particular representations of expertise to influence perceptions of industrial farming. Therefore, in my research, CDA helps to analyze and make sense of the patterns present in the discourse used in the documentary and licensetofarm.com, to show what interests are advanced and made more powerful.

CDA, as a form of discourse analysis, evolved mainly from critical linguistics in the mid-1900s, and is derived from several different theoretical traditions (Wodak & Meyer, 2009). A key thinker in the development of CDA is Norman Fairclough, who is often considered the

leading scholar in the field. His book *Critical Discourse Analysis: The Critical Study of Language* takes into account the relations between discourse, power relations and the complexities within the ways we communicate ideas, values, and ideologies (Fairclough, 2008). Using a CDA method allows me to demonstrate how the power relations at play in this campaign work to reinforce ideologies and the status quo (Wodak & Meyer, 2009). Because my research question is concerned with how representations of expertise as power relations are used to legitimize particular industrial practices over others (often in relation to economic factors), CDA is a powerful method to explore this question (Wodak, Meyer, 2009; Fairclough, 2008).

CDA relies on several key concepts that are fundamental for analysis. These key terms include discourse, ideology, and power, and need to be unpacked because they can be applied in different ways (Wodak & Meyer, 2009).

CDA: Discourse

Discourse is a term that has been defined in multiple ways, as it encompasses multidimensional social phenomenon (Wodak & Meyer, 2009, p.67). For the purposes of this project, I use CDA foundational scholar Van Dijk's approach to discourse whereby,

... a linguistic (verbal, grammatical) object (meaningful sequence or words or sentences), an action (such as an assertion or a threat), a form of social interaction (like a conversation), a social practice (such as a lecture), a mental representation (a meaning, a mental model, an opinion, knowledge), an interactional or communicative event or activity (like a parliamentary debate), a cultural product (like a telenovela) or even an economic commodity that is being sold and bought (like a novel) (as cited in Wodak & Meyer, 2009, p.67).

It is crucial to consider multiple forms of discourse and their context rather than simply focusing on text alone to get a broader understanding of the social inequalities and power relations at play. Indeed, this understanding of discourse helps me unpack the campaign to see in

what ways if any, is *License to Farm* constructing a narrative that embodies subtle and even obscured vested interests.

CDA: Power

In my research project, power plays an important role because of its close association to representations of expertise. In particular, I am interested in how power is veiled and often obscured, contrasted with how power positions are explicitly used to legitimize a particular stance. As with ideology, power can be understood in multiple ways, but in my project I mean power as control. Teun A. Van Dijk states in *Discourse & Power*, "Power is related to control, and control of discourse means preferential access to its production and hence to its content and style, and finally to the public mind" (Van Dijk, 2008, p. viii). Additionally, when speaking of power abuse specifically, Van Dijk describes it as "the violation of fundamental norms and values in the interest of those in power and against the interest of others" (Van Dijk, 2008, p.18). CDA scholars are generally interested in studying the way discourse produces or reproduces social domination, which is the abuse of power of one group over others (Wodak & Meyer, 2009, p.63). Moreover, Van Dijk discusses how power was classically defined in terms of class and the control over the material means of production, but that today power is largely about the control of the minds of the masses, and that control now requires the control over public discourse (Van Dijk, 2008, p.14). Power structures and their ability to manipulate the truth through power can be uncovered in many forms of discourse, including media, educational systems, or policy-making because those in power have the ability to garner support to prevent the amount of possible pushback. Thus, there are many ways in which this may take place through, "discursive manipulation, misinformation, lies, slurs, propaganda and other forms of discourse that are aimed at illegitimately managing the

minds and controlling the actions of people with respect to the reproduction of power" (Van Dijk, 2008, p.8).

Van Dijk's work on power and manipulation of truth through power shares some commonalities with Michel Foucault's work on truth regimes in *Power/Knowledge: Selected interviews and Other Writings 1972-1977* (1980). Here Foucault, a highly influential scholar on discourse and power, discusses the production and consensus of truth. He posits that truth does not exist outside of power but rather it is inherently tied to the idea of power, those who are given social power – such as experts or scientists – are thought to produce truth (Foucault, 1980). Foucault considers how each society has a truth regime as “mechanisms and instances which enable one to distinguish true and false statements, the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those who are charged with saying what counts as true” (Foucault, 1980, p.131). By this, Foucault is addressing how societies like the Western society understand what is considered truth. Foucault argues that what is considered truth largely centres on “scientific discourse and institutions which produce it..., it is produced and transmitted under the control, dominant if not exclusive, of few great political and economic apparatus (university, army, writing, media)” (Foucault, 1980, p.131). Moreover, Foucault notes how an intellectual's class position as well as their intellectual position (e.g. field of research or position in laboratory), play a significant role in their ability to derive a consensus around particular truths (Foucault, 1980). Foucault's work here informs the analysis of the License to Farm campaign in the way the documentary employs representations of expertise in order to validate scientific knowledge above all else.

CDA: Ideology

I use “ideology” relying on Norman Fairclough’s work that describes it as “representations of aspects of the world which contribute to establishing and maintaining relations of power, domination and exploitation” (Fairclough, 2003, p.218). Ideologies become an important factor in establishing power relations in society in which the dominant ideology produces and structures power relations. Dominant ideologies often appear as neutral, due to assumptions that largely stay unchallenged because they are normalized. Organizations striving for power will attempt to influence the ideology a society holds to become closer in line with their interests (Wodak & Meyer, 2009, p.8). My research aims to expose these interests by looking at how industrial farming practices, which are the dominant agricultural method in Canada, are legitimized by those in power who have a vested interest in maintaining the status quo.

CDA contends with power relations and this project works to disclose the flows of power through the analysis of representations of expertise. Because I am dealing with discourse in forms other than just text (e.g. documentary, appearance, speaker backgrounds), a pattern emerges in my research that demonstrates the many ways representations of expertise are applied to ensure a particular ideology is being pushed forward, namely the ideology that serves the interests of those with most power. CDA helps to expose the role of power under neoliberalism, which is often obscured under the discourse of a free market. Indeed, Coulthard and Caldas-Coulthard discuss how, what they call modern power in democratic societies, is “persuasive and manipulative rather than coercive, such as the explicit issuing of commands, orders, threats or economic sanctions” (Coulthard & Caldas-Coulthard, 1996, p.86). Therefore, the critical aspect of CDA ensures these obscured power relations can be unveiled and examined.

CDA is further useful for this project to uncover how and where power relations are established. Van Dijk (1996) discusses what he calls active and passive access, and their association to power. Those in power will have active access to producing powerful discourses, while passive access is usually that of the general public as they are more often than not only readers and viewers, not producers. In other words, not everyone has the same access to media, medical, political, bureaucratic or scholarly text and talk. More access to information and its production provides power to an individual because they are able to set dominant ideas and/or become better educated, giving true meaning to the saying “knowledge is power.” Van Dijk states, “power is based on privileged access to valued social resources, such as wealth, jobs, status, or a preferential access to public discourse and communications” (1996, p.86). Therefore, “we need to explore the implications of the complex question *Who may speak or write to whom, about what, when. And in what context, or Who may participate in such communicative events in various recipient roles*” (Coulthard & Caldas-Coulthard, 1996, p.86, emphasis original).

Additionally, the concept of power can be practically applied to the wider network of the License to Farm campaign. I next discuss how Actor Network Theory can allow me to break down the human and non-human entities that all work together to reinforce power relations.

Actor Network Theory

Actor-Network Theory (ANT) was developed by Bruno Latour, Michel Callon and John Law in the late 1970s and early 1980s, and is part of a social theory approach in Science and Technology studies (STS) (Hassard & Law, 1999; Law, 2009). Though its title suggests otherwise, ANT is much less a theory and much more a method of mapping networks of relation. Indeed, John Law makes it very clear that “[t]heories usually try to explain why something happens, but actor-network theory is descriptive rather than foundational in explanatory terms”

(Law, 2009, p.141). Latour mirrors this sentiment when stating that the actor-network approach means to follow the actors (and actants): “ANT simply doesn’t take it as its job to stabilize the social on behalf of the people it studies; such a duty is to be left entirely to the ‘actors themselves’” (Latour, 2005, p.30). ANT is a descriptive approach: it is not preoccupied with trying to explain the social forces at play but rather with describing the existing network connections. The ANT approach discloses networks of relation to show that social forces do not exist in themselves but are in fact products of the actions taken by the actors (Latour, 2005).

ANT looks to explore how networks are built, maintained and reproduce specific objectives by the ‘actants’ (non-humans) allied in the network (Carroll, Richardson & Whelan, 2012; Law, 2009, Latour, 2005). These interlocking forces gain stability as more entities join the network. A fundamental aspect of the actor-network approach is how human actors in the network are no more important than the non-human actants in the network. ANT reflects a socio-technical view of organizations. As Carroll et al. state, “this view incorporates the need to examine the hybrid nature of social (i.e., people) and the technical (i.e., things) in order to understand how actions are executed and the factors which influence the actions outcomes” (Carroll et al., 2012, p.52). ANT’s approach including humans and non-humans as equal parts in a network makes it a good method to contextualize this project’s exploration and it complements CDA. ANT allows for the often invisible or obscured network connections to be mapped out and disclosed. Latour’s actor-networks gain force through relation—an actor is its relations—and this relational approach “connects vast arrays of life and history, to mobilize gigantic forces, to detect dramatic patterns emerging out of confusing interactions, to see everywhere in the cases at hand yet more examples of well-known types, to reveal behind the scenes some dark powers pulling the strings” (Latour, 2005, p.22). Furthermore, “ANT provides the ability to uncover the chain of

actions or influences from various actors which are carried out to deliver a specific action and outcome” (Carroll et al., 2012, p.54).

While ANT encompasses a range of techniques to identify the interplay of forces in sociotechnical ensembles, my project is concerned with only a subset of what is offered through the ANT approach. In particular, the concept of translation in ANT is of particular interest to disclose the vested interests, power, and networks, which continue to be reproduced in the context of how representations of expertise are employed to leverage and secure industrial farming as the dominant agricultural practice. Michel Callon describes translation as a displacement, wherein “to translate is to displace... to express in one’s own language what others say and want, why they act in the way they do and how they associate with each other: it is to establish oneself as a spokesman” (1986, p.223). Carroll et al. discuss the way in which actor-network studies often examine the concept of power and how it is used to impose order on actants to meet specific interests (Carroll et al., 2012). This suggests that the nature of power may play a significant role in actor-network formation through translation (Carroll et al., 2012).

There are four phases of translation, the first of which is **Problematisation**. Callon discusses problematisation as the process of defining of the problem or opportunity with which an actor proposes a solution. Defining the proposed solution acts as the obligatory passage point (Callon, 1986; Carroll et al., 2012). In regard to the License to Farm campaign, the solution is to use and apply the social license approach in educating the public on farming practices in Canada. The second phase being **Interessement**, is described as attracting other actors in this proposed solution to favour a new opportunity, which confirms the problematisation phase (Callon, 1986; Carroll et al., 2012). In my project, this includes the organizations taking part in applying the social license approach. The third phase is **Enrolment**, which is a process of negotiation

exposing how the interessement meets the actors' interests and needs, and persuades them to accept the new actor-network (Callon, 1986; Carroll et al., 2012). The final phase is **Mobilisation**, which is the important process of ensuring that actors represent other actors' interests (Callon, 1986; Carroll et al., 2012). These phases are explored in more detail in Chapter 3 to demonstrate the interests reproduced through translation.

ANT allows me to bring into focus the often-overlooked connections, the non-human actants, which are part of the network that makes up the *License to Farm* campaign. For example, media objects (such as the hashtag, licensetofarm), and promotional circuits such as social media accounts act as crucial allies in the network. Networks are much more complex and revealing when considering both human and non-human actors. Indeed, ANT looks to "examine the motivations and actions of groups of actors who form elements, linked by associations of heterogeneous networks of aligned interests" (Walsham, 1997, p.468). What ANT does for this project is make visible the vested interests and show the controversy in using a social license approach to simply alter the way an agenda is pushed through. I apply ANT to the License to Farm campaign as a whole and consider the ways the phases of translation take place through both human and non-human actants. The ANT approach considers human actors, the people in the film and also the non-human actants, including film aesthetics, other media objects, and promotional processes and circuits. The actor-network demonstrates how these actants are all connected as a web of relations in articulation with one another to serve a particular interests and relations to power (Latour, 2005). While not explicitly conducting a full actor-network theory analysis, my examination of the accompanying materials and the speaker backgrounds are informed by ANT. I work with the assumption that various individuals (actors) and

communication materials (actants) all have a role to play in the reach and impact of this particular campaign.

Content Analysis

Lastly, this project employs content analysis to track and analyze prevalent word use (Weber, 1990). This method is used to analyze the License to Farm documentary and the associated website. Moreover, the content analysis method provides further context for the CDA findings. I accomplish this by manually tracking the following words based on my preliminary observations: industrial, safe, organic, experts, knowledge, trust, efficient, sustainable, fear and educate. I apply content analysis as a method not only to see how many times something is talked about, but also *how* it is talked about. For example, how many times is industrial farming mentioned, and what is the narrative surrounding that mention? The goal is to see what kind of messages are given primary through the campaign and how representations of expertise are being used to push which particular narratives? In addition, I manually track numbers and patterns in the narrative of the documentary following these guiding questions:

- How many times industrial farming is portrayed as positive?
- How many times is industrial farming compared to other forms of farming, such as organic or agroecological?
- How many times are representations of expertise used to promote industrial farming?
- How many times are representations of expertise used to discredit concerns of industrial farming and points made of other ways of farming?
- Who are the speakers in the film?
- How many representations of expertise involve male versus female speakers?
- How are the speakers in the documentary described/named?

Chapter 3: Analysis

The first part of this chapter consists of a systematic analysis of the discourse in the *License to Farm* documentary. I look for values, hidden meanings, power relations and particular representations of expertise found in the film. As the documentary is divided into “chapters”, I conduct my analysis chapter by chapter, and then hone in on a key theme that emerged in the portrayal of “concerned consumers.”

Along with the documentary there is a website associated with the film where the public is provided with a broader overview of the campaign and different methods of getting involved. I provide an analysis of the website associated with the film and its components. This includes a description of the relevant sections of the website such as the “about” tab, the “testimonials” tabs, the “resources” tab, and the “connect” tab. Moreover, I discuss the resources the website uses to disseminate its message further through its social media platforms of Facebook, Twitter, and Instagram, as well as the “screening in a box” kit made for classrooms.

Next, I examine the backgrounds of the speakers in the film. The film features a series of speakers along with their associated titles, but of course, each speaker has other dimensions to them, including other associations within the Canadian agriculture sector. These associations help further contextualize the power relations and vested interests potentially at play with the Licensee to Farm campaign.

The analysis also utilizes visual data (screenshots, tables, still images). My analysis on a whole suggests that perhaps the documentary is less about educating the public and more about securing continued support for industrial farming. I return to this observation in my final chapter where I discuss License to Farm campaign as a textbook case of “social license” approach to

public relations practice. Finally, I describe the funding structure of the campaign and provide a brief overview of the of the core funder of the documentary, SaskCanola.

I also employ CA to contextualize any key terms and narratives found in the documentary to see if there is a specific focus on portraying particular types of farming methods as positive. The use of CA can help inform whether or not there is a message manipulation (from campaign proponents), to secure support in industrial farming, to subsequently secure corporate and industry interests.

Also of note in the film are specific instances of language use, backdrops and clothing to reinforce the message; I spend little time on those observation in this chapter. Instead, I discuss them in greater detail in Chapter 4 (Discussion) to allow for an in-depth interpretation and theoretical interrogation of the use of these discursive tools while avoiding repetition in my critical treatment of this material.

License to Farm Documentary

The *License to Farm* documentary is a thirty-minute documentary organized in five chapters and for the purposes of clarity, I abbreviate each chapter: Chapter 1 (LTF-C1): Clouds On The Horizon, Chapter 2 (LTF-C2): GMO Foods, Chapter 3 (LTF-C3): Pesticides, Chapter 4 (LTF-C4): The Romantic Ideal, and Chapter 5 (LTF-C5): Credible Voices. The film includes a number of speakers, who are listed in the table of Figure 4.5 in the “Looking Beyond the Film” section. They are listed in order of appearance, along with their associated title.

LTF-C1: Clouds on the Horizon

This documentary chapter opens with visually appealing footage of dated farming equipment, cars and worn-down barns. This deliberate decision is chosen because of the narrator’s opening statements of how family farming is part of a 200 year old tradition in

Canada. There is no acknowledgment of the colonial nature of this tradition, so this two-century tradition is decontextualized and cast as simply developing on its own. Within the first ten seconds the viewer is already introduced to farming as a family business, operated by families and not large corporations. The narrator is trying to engage the viewer to view farming as something done on a smaller scale regardless of whether the methods are industrial or agroecological. The viewer is then taken through the similarities in the challenges of weather, soil fertility, pests, and commodity prices, that were faced by the first generation of Canadian farmers and are still faced by farmers of today (*License to Farm*, 2016). However, as the narrator suggests, today's farmers are "better equipped to tackle those same challenges with breakthroughs in genetics" and "cutting-edge technology", that allow farmers to grow food in "greater abundance", "more quickly with less energy and environmental impact" (*License to Farm*, 2016). The narrator goes on to say how no other society has enjoyed the variety and abundance of food that Canadian consumers now have.

The language use here is significant. Before the first minute of the film has passed, words like "cutting-edge", "breakthroughs", "abundance", "enjoying", "variety", "less energy", and "less environmental impact" are all used (*License to Farm*, 2016). This grouping has positive connotations. People generally associate and understand the words listed above as positive. Therefore, a word like breakthrough can carry a lot of weight because it nudges the viewer to see modern agriculture as generally positive. These terms bring a sense of hope, progress, security, happiness, responsibility in our future, our food production, and our practices, and leave little room to see any negative consequences.

The viewer is brought to an understanding of how seemingly great Canadian agriculture is *because* of all of the abundance, and technological advancements. The build-up to portray

Canadian agriculture as better than ever is important because of the narrator's transition in discussing the next and main issue of the film, which is the consumer pushback against industrial food production. One speaker, Cheryl Nagel, a Saskatchewan farmer, states that there is "a lot of misinformation and that worries me," and this is shortly followed up by Ian Epp, a M.S.C Candidate at University of Saskatchewan, stating how "the vast majority of the public is so far removed from agriculture that for the first time ever there's a huge disconnect" (*License to Farm*, 2016). Epp moves on to discuss how conceptions are still stuck in the 1940s-1950s of really small farming. Moreover, Dr. Joe Schwarcz, the Director of the Science & Society Office at McGill University, then mentions how people are "confused" and "bewildered" because there is so much controversy and nutritional issues being discussed that people just do not know who to trust (*License to Farm*, 2016). The discussion then shifts to how people turn to doing their own research but what they are left with are findings that "aren't always true" "isn't always scientific" and "for the most part, are not directly from the source" (*License to Farm*, 2016).

These first few speakers alone are already beginning to delegitimize public concerns over industrial farming. This is done in two ways. First, the language used by the speakers such as "misinformation" "confused" "bewildered" "disconnect" "not scientific" and "not from the source" (*License to Farm*, 2016). These terms stand in contrast to the positive terms used at the start of the documentary. In this case, the terms are all used to describe the consumer. These terms connote a less than positive message about the consumer. The terms all work together to portray a public that is so far removed from the facts that they could not even find them if they wanted to, because when they do conduct their own research, they get it wrong and end up misinformed. This, of course implying that the public simply cannot be trusted to find factual information on their own. Second, the visuals are also suggesting that people are getting

misinformed by showcasing web searches on popular but not necessarily credible research platforms. Indeed, the two search platforms shown are Google and YouTube as shown in Figures 1.1, 1.2, and 1.3. Here the documentary is suggesting that public concerns are based on simple Google searches and YouTube videos. These popular sources of information are obviously not as credible as peer-reviewed publications which do discuss modern agricultural social and environmental concerns with scientific evidence that the public could be getting their information from (Kerr, 2012; Beck et al., 2003; Schomerus et al., 2010). However, the viewer is only presented with a view of the consumer as misinformed and unable to obtain credible information on their own. Speaker Tom Wolf, president of Agrimetrix, an agricultural spray company, suggests the idea of an anti-farm movement in which “there’s money in the anti-farm movement. Someone is making money off of it, they’re selling an alternative and farmers are paying the price” (*License to Farm*, 2016). Again, the viewer is given the message that there is an organized ‘anti-farm movement,’ as opposed to a movement against industrial farming as a particular food production method. It would be difficult to imagine that anyone can simply be against farms – all farms – in contemporary Canada; even in communities that traditionally did not farm (and instead relied on hunting, fishing, and gathering of foods), food from farms is now crucial to survival. Further, Wolf characterizes this supposed movement as not credible and simply a “money making business” (*License to Farm*, 2016). This example illustrates very well how the documentary presents an “us versus them” situation between supporters of industrial farming and consumers. Grouping consumer concerns under the broad anti-farm umbrella, works to vilify the consumer as being against all farming methods and not just the prevalent use and impacts of industrial farming practices. Similarly, Schwarcz, discusses how this movement presents a romanticized idea rather than a scientific one, thereby delegitimizing public concerns.

Schwarzc positions the anti-farm movement as a lost cause because it is only based on romanticized, unrealistic ideas of farming and not based in factual, scientific, credible explanations.

Figure 1.1: *License to Farm* documentary still

Figure 1.2: *License to Farm* documentary still

Figure 1.3: *License to Farm* documentary still

The overarching discussion in LTF-C1: Clouds On The Horizon sets up the concerns around industrial farming as not scientifically based, but rather as a romanticised vision derived from inaccurate search engine results. The speakers in the first chapter of the documentary address how the pushback is arising because farmers are simply not talking to the public about their values and methods, and that this disconnect is what causes consumers to conduct their own ‘amateur’ research characterized as misinformation. At no point in LTF-C1 is there a comment about the possible legitimacy of these concerns or how they might actually be based in social and environmental realities. Rather, the comments work to situate the concerns as based on emotions and ignorance and thus delegitimize them.

LTF-C2: GMO Foods

Consumer pushback is the focal point of much of the documentary and the film addresses three supposed areas of misinformation and concern. The first consumer concern is discussed in the documentary’s second chapter: GMO Foods. This chapter begins by outlining what the concerns are regarding genetically modified organisms (GMO). The first few speakers from this

section address how genetically modified foods have been around for thousands of years. Blaine Chartrand, head of the Polytechnic Bio Science Tech. program at the University of Saskatchewan, calls GMO foods “the next level in plant breeding” which phrasing implies that this is the natural progression of plant breeding and agriculture (*License to Farm*, 2016). Mark Lynas, an environmental activist and author, states, “people avoid GMOs because they think they are carcinogenic despite there being no evidence for that, and everyone is busily pouring alcohol down their throats, which is a proven carcinogen” (*License to Farm*, 2016). This is clearly intended to show that people are irrational and cannot be trusted with their concerns because they do not seem to mind certain carcinogens and have contradictions in their risk behaviour. Moreover, it suggests that consumers are basing their GMO concerns on the safety of the food itself and not on the environmental and social implications of the technology. In addition, Lynas is intentionally grouping alcohol consumption, (and possibly overconsumption of it, given his use of the word ‘pouring’) with concerns over food production. By associating the two together, Lynas undermines the validity of GMO concerns because of the dominant societal perceptions of alcoholics as disruptive, difficult, and selfish (Židanik, Pastirk, & Mrzlekar-Svete, 2007). Pairing alcohol and GMO concerns works at undermining any rationality behind the perceived concerns over GMOs. Indeed, the discussion of consumer “fear” is brought up frequently throughout the film to persuade the viewer to judge the consumer concerns as driven by emotions and, indeed, by health rather than social and political concerns.

Dr. Wilf Keller, President of the bioscience company, Ag-West Bio, discusses public fear over the safety of our food, which he says is the “furthest thing from the truth” (*License to Farm*, 2016). He addresses this by explaining how Canada’s regulatory system is a “sophisticated” “thorough” and “strict” process of different steps and tests, which take place to ensure there “is

no safety issue, no environmental issues what so ever” (*License to Farm*, 2016). Keller is removing any basis for public concerns over GMOs by stating that there is no issue “whatsoever” (*License to Farm*, 2016). Moreover, he does not just say that public fears are incorrect but that they are “the furthest thing from the truth.” Therefore, the fear and the reality, according to Keller, are on complete opposite ends from one another.

The speakers address how GMO crops are a crop protection tool and are not harmful. Keller ‘scoffs’ at any GMO concerns by discussing scientific findings opposing any concerns over superweeds or the genetic make-up of the organism. Keller uses the example of canola oil in stating that there is no evidence showing any differences between genetically modified (GMO) canola oil and non-GM oil such as organically or conventionally produced canola (*License to Farm*, 2016). Lynas then states that by using any kind of crop protection, evolution will step in and try to adapt, thus normalizing pesticide resistance as something natural – an inherent part of nature. He then compares crop protection to antibiotics. He states: “It’s like saying we shouldn’t use antibiotics because of antibiotic resistance. So therefore, everyone needs to go back to dying of pneumonia and other preventable diseases. Now that’s dumb but it’s just as dumb to say that about agriculture” (*License to Farm*, 2016). It is an unfortunate and tactical analogy for Lynas to use, as the World Health Organization has declared antibiotic resistance to be “one of the biggest threats to global health, food security, and development today” (2017). What is equally important here, however, is that Lynas is once again reducing concerns over GMO crops to idiocracy with no legitimate scientific standing. By mentioning “other preventable diseases” he is lumping antibiotic debates with the anti-vaccination² activism, and then

² The anti-vaccination movement is largely fueled by public perceptions that the common measles, mumps, rubella a.k.a the MMR vaccine has strong links to the onset of autism spectrum disorders (ASD) (Kolodziejki, 2014). As such, there has been a significant decrease in immunization rate. For instance, as Kolodziejki notes, in 2002 the MMR immunization rate in the U.K

comparing those worries with GMO worries, seeming to suggest that the general public cannot be trusted to get their facts straight.

Along with promoting GMO crops as an environmental protection tool, the speakers also promote it as a health tool (*License to Farm*, 2016). Keller states how GMO crops can help prevent “terrible diseases and many deaths” by introducing different nutrients and vitamins into a crop where many local residents are deficient, such as Vitamin A in sub-Saharan Africa (*License to Farm*, 2016). Again, a fear tactic is used here in stating that by using GMO crops diseases and even deaths could be prevented. Whereas this has been the industry claim regarding GMO crops for at least two decades, there seems to be no evidence that such crops have in fact alleviated disease, hunger or malnutrition anywhere thus far, mainly because the causes of those problems are social and political and not technological (Moseley, 2017). Additionally, the speakers are pushing a message about the tremendous potential in GMO crops and suggesting that public concerns are stopping that potential materializing (*License to Farm*, 2016). Here, all concerns are being heavily challenged. Indeed, Dr. Schwarcz states how “at this point, based on the scientific knowledge that we have today, the benefits greatly outweigh the risks” (*License to Farm*, 2016). This is the first point in which the word risk is mentioned not in relation to discredit it. However, what is noteworthy is that it is simply mentioned in passing, but no time is spent of describing the possible risks that Dr. Schwarcz touches on³.

dropped below 85% (2014). Parental decisions to exempt their children from vaccinations is high enough that outbreaks of infectious diseases have occurred (Kolodziejewski, 2014).

³ There are associated risks tied to GMO’s food such as increase chemical use and can create superweeds, superpests, and superviruses (Clapp, 2012; Shiva, 2000). Moreover, GMO seeds are created for monocrops and therefore works at destroying biodiversity (Clapp, 2012; Shiva, 2000). In organic farming, seeds are saved for the following year, but with GMO seeds, they must all be paid for and create serious financial difficulties for farmers as the cost of the seeds, the technology needed, and the increase chemical use are all increased (Bronson, 2015; Clapp, 2012; Shiva, 2000). Though they are advertised as creating more yield, GMO seeds are most commonly created for herbicide resistance (Shiva, 2000), which can boost pesticide sales. The Green Revolution demonstrated that “better” seeds did not feed the global south but played a role in the large numbers of farmer suicides that took place because of the technology rendering farmers bankrupt due to not being able to make ends meet with the

LTF-C3: Pesticides

The foregoing discussion leads into the third chapter in the documentary, *Pesticides*; in particular, concerns over pesticide use in modern agriculture. Speaker Tom Wolf discusses how public fear that farmers spraying their fields is linked to higher rates of cancer is moot. Indeed, Wolf explains how 99% of what people see from the mist associated with spraying is just water (*License to Farm*, 2016). Additionally, Dr. Schwarcz follows up in stating that something dangerous in large doses is not necessarily dangerous in a small dose and uses aspirin dosages as an example of this (*License to Farm*, 2016). One could cause serious harm and even death in taking a much larger amount than is recommended. In contrast, one could soothe a headache by only taking one or two (*License to Farm*, 2016).

Cherilyn Nagel moves on to state that the chemical pesticide use is “needed” to address very specific problem areas. Nagel uses terms like “needed” and “necessary” to convey her message that the public can “rest assured” that the products used are safe and required to ensure the “viability and health” of the crops (*License to Farm*, 2016). However, we know that organic farmers avoid using any chemical pesticides and still manage to get healthy crops. What would perhaps be more accurate for Nagel to state is that in order to produce the large quantities of monocrops that industrial farms produce, chemical pesticides are a great tool in reducing crop loss. Indeed, here pesticide use is portrayed as a “revolutionary tool” and discussed in a very positive manner (*License to Farm*, 2016).

The use of pesticides is further discussed with Wolf stating how pesticides are very targeted in what they focus on. Furthermore, Wolf states how they have no use in areas other

associated costs (Shiva, 2000). Additionally, biotechnologies are intimately tied to the chemical corporations as they have boosted sales in chemical use further propagating chemical pollution (Bronson, 2014; 2015).

than what they were fabricated to do which therefore, provides a “powerful basis for their safety” (*License to Farm*, 2016). In addition to their safety, Wolf acknowledges how safety tests for pesticides are in place to determine the level that is “100% safe for an individual,” but on top of that the dose is then chosen to be lower than the recommended dosage to ensure the vulnerable consumers are also protected (*License to Farm*, 2016). Schwarcz moves the discussion to our regulatory system being a body that is there simply to “protect the public and not undermine them” (*License to Farm*, 2016). Yet it is not unheard of that organizations can state one thing but do another. For example, tobacco companies’ advertising historically used white-coated men dispensing pro-smoking advice, which made smoking appear safe due to the use of perceived health professionals (Anderson, 2010). Additionally, the pharmaceutical industry has come under scrutiny many times when being accused of hiding safety information from the public on medications (Vogel, 2017).

LTF-C4: The Romantic Ideal

In the fourth chapter of the documentary, speakers attribute the concerns about industrial farming held by members of the public to the fact that people simply do not want to see change. In addition, the film addresses a public belief that a lot of farmers are forced into buying a particular company’s seeds; yet the speakers discredit this belief by stating that farmers actually make those decisions because it is what is best for them and their crops (*License to Farm*, 2016). There is ample literature that has documented industrial agricultural practices that counter this argument. Bronson (2014) makes note of this by addressing how corporate giants like Monsanto effectively trap farmers to buying their seeds or bankrupt them in legal fees should they refuse.

A discussion of land use is then raised. Ironically, modern farming technologies like pesticides, herbicides, insecticides, biotechnologies, are used to address the issue of how

industrial farming uses an immense amount of land as shown in Figure 1.4 (Statistics Canada, 2016). By introducing these technologies, the idea is that less land has to be used because farmers can better control their crops and grow higher yield, allowing them to use less land to grow the same amount of food. Lynas discusses how modern technologies allow farmers to use much less land to grow the same amount of yield, which “spares larger areas for the rainforests, wetlands, and other areas of habitat” (*License to Farm*, 2016). Additionally, Lynas goes on to state that if the whole world were to resort to organic farming, we would have to “double the area of land we are plowing up, which would mean destroying the rainforest” (*License to Farm*, 2016). There are two important points to make here. Firstly, even though we are now producing more food than we ever have before, there are still prominent and growing hunger concerns (Avery. T, 2011; Goldman. R, 1999). Moreover, studies show that the majority of monocropped land is used to grow is corn and it is predominantly used to feed the vast number of cattle farms currently in production and not actually for human consumption (McEwen & Mandell, 2004). Additionally, the 2016 Canadian agricultural census, shows that the top two agricultural operations in Canada are indeed, Oilseed/Grain and beef as shown in Figures 1.5 and 1.6 (Statistics Canada, 2016).

In 2016, there were **271,935** farm operators and **193,492** farms with a total area of **158.7** million acres across Canada.

Figure 1.4 Census Canada 2016

Figure 1.5: Census Canada 2016

Figure 1.6: Census Canada 2016

Secondly, Lynas is equating industrial farming to saving the rainforest and the environment, and alternative ways of farming to essentially destroying them. There are farmers in Canada who practice organic, ecological and diverse farming, however, never once is such

farming presented in a positive light by the speakers. Organic farming, for instance, may take up more land, but it can actually create more biodiversity and regenerate ecosystems thus ensuring long-term sustainability of food production (Crowder et al., 2010; Fan et al., 2018; Wingvist et al., 2012). However, the speakers in the film simply focus on organic farming as inefficient *because* of the land use necessary. Sustainability need not only be measured by yield produced on the smallest amount of land but can be measured in a multitude of ways such as growth in biodiversity.

The speakers address how the three main concerns (GMO, pesticide use, romantic ideal of farming) have such an influence on the public because they respond to these issues emotionally and out of fear and not science. The speakers are suggesting that people are acting on an emotional level and not a logical level, thus further discrediting the validity of any concern. There is then a slight shift in narrative for the last chapter which uses an emotional angle to persuade the viewers, despite the speakers having criticized the emotional nature of consumer concerns.

LTF-C5: Credible Voices

Despite the fact that the speakers discredit public concerns over GMOs and pesticides by calling them an emotional response (fear) not supported by science, the last chapter sees a slight shift in narrative which itself uses an emotional angle to persuade the viewers. The focal point of this final chapter is to get farmers talking with the public more and sharing their values and love for the industry. This chapter has a predominantly emotional approach in discussing how farmers have to be the ones talking with the public, so they can appeal to them on an emotional level. The message is that farmers need to go out and “tell their story” (*License to Farm*, 2016). This chapter has a major anecdotal component to it. The idea being that people need to hear from the

farmer rather than the large corporations. This is presented as necessary because people simply do not understand Canadian farming practices, but arguably this can also be viewed as a public relations tool. Getting the farmer, who among all the people involved in industrial farming is the closest individual to a layperson due to the similarity of social status, to talk to the public can be viewed as the best way to appeal to people by choosing the seemingly less authoritative person and the most similar in social class. Indeed, studies show that people are most likely to trust someone who is most like them (Glaeser, Laibson, Scheinkman, Scoutter, 2000).

Looking Beyond the Film: Speaker Backgrounds

As this project developed, it became clear that understanding who the speakers in the documentary are is a crucial line of inquiry. Staying with the same order the speakers appear in the documentary, I outline important points to consider when discussing how the speakers are portrayed, what other roles they have in their lives outside of the documentary, and what interests they may be representing.

The first speaker in the documentary is Doyle Wiebe. Wiebe, dressed in plaid, is presented as a farmer in the documentary. However, he is and has been on numerous boards of large industry associations in the Canadian agriculture. These include SaskCanola, the organization that predominantly funded and produced the documentary, as well as the board for the Canadian Canola Growers Association (CCGA). Figures 1.7 and 1.8 demonstrate these affiliations (www.saskcanola.com; www.ccga.ca). Though Wiebe is involved in other areas of agriculture, he is only presented as a farmer in the film.

To accomplish all of this, SaskCanola Directors attend five board meetings per year, participate on Board committees, and attend industry and producer meetings to ensure canola producer's interests are heard. The Directors commit approximately 40 days per year of their time to SaskCanola to ultimately benefit the producers of Saskatchewan.

Figure 1.7: Doyle Wiebe SaskCanola board member

Figure 1.8: Doyle Wiebe Canadian Canola Growers Association board member

Stan Jeeves, dressed in plaid, is also only promoted as a farmer in the film. However, he too was previously on the board of directors for CCGA and Figure 1.9 demonstrates this (www.ccca.ca). Continuing with this pattern, Cheryl Nagel is also presented as a farmer even though she is affiliated to other organizations. Nagel is an avid advocate for modern agriculture. She is connected to Farm & Food Care Saskatchewan, which is a branch of Farm & Food Care (www.farmfoodcare.org). Under the “About us” tab, Farm & Food Care’s website states, “The common goal is to build public trust in food and farming in Ontario and across Canada. Farm & Food Care Ontario is active in promotion, education, program development and consumer research” (Figure 2.0). (Farm & Food Care, 2018). Additionally, Figures 2.1 and 2.2 demonstrate how she serves on the board of the Western Canadian Wheat Growers Association, Canada Grains Council, Saskatchewan Agri-Value Initiative (SAVI), and trains farmers through the “Real Dirt on Farming” program (part of Farm & Food Care Canada) (www.connectag.ca; www.globalfarmernetwork.org). Again however, she is only portrayed as a farmer in the documentary itself, though she briefly touches on her role in training farmers to speak to the public as part of her role with Farm & Food Care Saskatchewan.

The board elected Todd Hames from Marwayne, Alberta to serve as President and Brett Halstead of Nokomis, Saskatchewan as Vice-President. In accepting his two-year term as President, Hames thanked the retiring directors including Ed Schafer, Brian Chorney and Stan Jeeves. “These directors have dedicated many years of service and provided strong leadership for Canada’s canola farmers,” said Hames. “We thank them for their commitment and wish them all the best.”

Figure 1.9: Stan Jeeves Canada Canola Growers Association board member

Farm & Food Care Ontario (also known as Farm & Food Care) is a whole-sector coalition made up of representatives from all farming types and associated businesses, and positions itself as the helpful expert on Ontario agriculture. The common goal is to build public trust in food and farming in Ontario and across Canada.

Figure 2.0: Farm & Food Care Ontario website

In 2004, Cherilyn was elected as President of the Western Canadian Wheat Growers Association and after a successful 5 year term, she remains a director on the current board. Cherilyn has been appointed to the Advisory Committee of the Agriculture Development Fund to provide assistance in directing decisions regarding provincial funding of research and development programs and projects. As part of her role with ADF, Cherilyn is Chair of SAVI (Saskatchewan Agri-Value-Initiative). She also sits on the board of the Canada Grains Council.

In addition to her numerous other duties, Cherilyn works with Farm & Food Care Saskatchewan, facilitating workshops for farmers and others in the ag industry. This program provides training to help farmers speak confidently to consumers about how they grow food.

Cherilyn has traveled extensively and had the opportunity to represent the Wheat Growers while participating in the World Trade Organization Ministerial Meetings in Hong Kong. Traveling abroad has given her a unique perspective on the Western Canadian agriculture industry and she has an avid interest in expanding the processing of locally grown commodities.

Figure 2.1: Cherilyn Nagel Western Canadian Wheat Growers Association board member

Cherilyn Nagel

Farmer, Saskatchewan,
Canada

Cherilyn Nagel, along with her husband David and family, grow durum wheat, chick peas, canola and lentils on a family farm in Mossbank SK, Canada. Noted as one of Saskatchewan's Most Influential Women, Cherilyn enjoys promoting stories of agricultural successes and has been recognized for her efforts and passion for making positive changes in the agriculture sector. Cherilyn Nagel volunteers as a board member for the Global Farmer Network and is a former President of the Western Canadian Wheat Growers Association where she continues to serve as a director. She is training other farmers to share their stories through the "Real Dirt On Farming" program, works with Farm and Food Care in Saskatchewan and has been appointed by the Ministry of Agriculture to Chair the Saskatchewan Agri-Value Initiative (SAVI) and Agriculture Development Fund, focused on creating future growth opportunities and enhance the competitiveness of the provincial ag industry.

Figure 2.2: Cherilyn Nagel Saskatchewan Agri-Value Initiative board member

The same is found for the next speaker Dale Leftwich, who is only represented as a farmer in the documentary. Along with Wiebe, Leftwich is another speaker who also served on the board for SaskCanola at the time of the documentary (www.saskcanola.com). In addition to this, Leftwich was also a member on the board for CCGA; as shown in Figures 2.3 and 2.4. Furthermore, in an article by *Real Agriculture*, Leftwich discusses his interest in biotechnologies at the UN Biotech Conference (www.realagriculture.com, March 1 2016).

Figure 2.3: Dale Leftwich Canada Canola Growers Association board member

SaskCanola today announced the results of their election, which sought to fill four positions on the Board of Directors.

Charlene Bradley of Stranraier, Bernie McClean of Glaslyn, Lane Stockbrugger of Englefeld and Dale Leftwich of Esterhazy will fill those roles.

"We are pleased to welcome Charlene, Bernie, and Lane to the SaskCanola Board and to have Dale return for another term," said Franck Groeneweg, Chair of SaskCanola, in a release. "Their experience within the canola industry will be invaluable to the Board."

Figure 2.4: Dale Leftwich SaskCanola board member

The next speaker in the film is Ian Epp who is presented as a M.Sc. Candidate at the University of Saskatchewan. However, as Figure 2.5 shows, Epp is also an Agronomy specialist at the Canola Council of Canada who focus on crop protection and innovation (www.canolawatch.com), so Epp's livelihood is intimately tied with industrial farming technologies.

Figure 2.5: Ian Epp Canola Council of Canada agronomy specialist

Dr. Schwarcz, dressed in a suit, is a professor at McGill University. In addition, he is also the Director of the Office of Science & Society at McGill, which has received funding from The Council for Biotechnology Information whose members include biotech (GMO) industry giants Dow, Monsanto & Dupont (see Figures 2.6 and 2.7).

Figure 2.6: McGill Office for Science & Society funding

Figure 2.7: Council for Biotechnology Information members

The viewer is then introduced to Megan Madden who is presented as Consultant at South Paw PR Inc. Madden, who is the owner of the firm and discernibly has a background in public relations. Moreover, her background also lies in precision agriculture marketing and Bayer CropScience sales as Figures 2.8 and 2.9 demonstrate (www.linkedin.com).

Owner & Communications and Public Relations Consultant
 southpaw PR inc.
 May 2007 – Present (10 years 9 months)

southpaw PR inc. is an independently owned strategic communications consulting business that offers concept-to-completion communications solutions to a diversity of industries. Want your brand to have personality? That's what we do best!

southpaw draws mostly on sarcasm and wit, but pairs it well with experience in a diversity of industries to offer exemplary service and quality of work to both current and potential clients.

Services include:

- Internal and external communications strategy development and implementation
- Business branding
- Public Relations
- Media Relations (and corporate media training)
- Investor Relations
- Employee Communications
- Content Development (web, social media etc.)
- Social Media and online strategy
- Corporate Workshops and Training (social media, business writing, branding, public speaking, presentation skills, client communications etc.)
- Keynote speaking
- Event strategy, planning and management

Services are offered on a per-use and a la carte basis, so southpaw is able to cater to those organizations that may not be able to allocate resources necessary to hire a full time employee or agency for their communications needs.

Figure 2.8: Megan Madden LinkedIn profile

Precision Agriculture Solutions Manager
 Andrukow Group Solutions
 November 2010 – July 2011 (9 months)

Creation of a new agronomy business division for precision agriculture for an independent ag retail chain. Business development, marketing.

Territory Sales Manager
 Bayer CropScience
 March 2006 – November 2010 (4 years 9 months) | Alberta, Canada

Agronomic sales, business development, budgeting, forecasting, relationship management.

Figure 2.9: Megan Madden LinkedIn profile

Tom Wolf is president of Agrimetrix Research Training. He specializes in spray application technology, and has expertise in spray drift and pesticide efficacy as Figures 3.0 and 3.1 show (www.agrimetrix.ca). This is the particular kind of representation of expertise that is being used to persuade. The film specifically includes speakers with expertise in industrial farming, which also speaks to the power relations. The viewer is not subjected to a balanced view of Canadian agricultural practices but the particular one of industrial farming. This helps bring to light how there are vested interests at play in the background and it is not simply about educating the public.

Figure 3.0: Tom Wolf Agrimetrix website

Figure 3.1: Tom Wolf Agrimetrix bio

Lindsey Smith is introduced as the editor of *Real Agriculture*, an informational website that produces articles, videos and podcasts on Canadian agriculture (Real Agriculture, 2018). However, her background reveals that she is also associated with Farm & Food Care as shown in Figure 3.2 (www.linkedin.com). As mentioned Farm & Food Care is an organization attempting to build public trust on farming practices in Canada (Figure 2.0). Though not directly linked to the campaign License to Farm, they are also listed as a resource on the licensetofarm.com website (www.licensetofarm.com).

Figure 3.2: Lyndsey Smith LinkedIn profile

Mark Lynas is perhaps the most interesting example, and is introduced as an environmental activist and author of *The God Species*. But he is also an environmental activist who has changed his stance on GMO crops. Reporters Zack Kaldveer and Katherine Paul address Lynas' change of heart regarding his GMO beliefs after, as he claims, he looked at the evidence displaying the positives of the technology (2013). However, Kaldveer and Paul's article reference a document from EuropaBio, a biotech company with members including Dupont, Dow, Monsanto, Bayer, Nestle etc. reaching out to Lynas to become an Ambassador. Though Lynas denied this, *The Guardian*, as also mentioned in Kaldveer and Paul's piece, published the draft letter from EuropaBio, which clearly states that they had "the potential involvement from

Mark Lynas” to become an ambassador to the company (*The Guardian*, October 20 2011).

Moreover, EuropaBio’s board is predominantly made up of individuals representing large corporations like Monsanto (www.europabio.org).

Dr. Wilf Keller, dressed in a suit, is presented as President of Ag-West Bio. Ag-West Bio is an industry association focused on growing bioscience research, and includes several large industrial corporations as members such as Bayer, Dupont, Dow, SaskCanola, and Viterra (www.agwestbio.sk.ca). As Figure 3.3 shows, Keller has been actively involved in the development and application of biotechnologies for the genetic modification of crops, particularly canola (www.agwestbio.sk.ca). He has collaborated with numerous government, university and industry groups and has provided training for researchers in plant biotechnology (www.agwestbio.sk.ca).

Ag-West Bio Staff

Wilf Keller (President and CEO)

Throughout his 40 year science career, Wilf led many major research initiatives. These included the application of genomics in canola improvement; the development of industrial bioproducts from vegetable oils; and production of bioactive natural products in plants for enhanced human health and quality of life. In 2015, Wilf received the province's highest honour, the Saskatchewan Order of Merit, and in 2017 he was inducted into the Saskatchewan Agricultural Hall of Fame.

Figure 3.3: Wilf Keller Ag-West bio

Blaine Chartrand is presented as Program Head Sask Polytechnic Bio Science Technology Program. The BioScience Technology program works with industry partners to grow the bioscience industry in Saskatchewan (www.saskpolytech.ca). Again, the focus is on growing biotechnologies for modern agricultural practices as Figure 3.4 demonstrates.

The BioScience Technology program works with industry partners to grow the bioscience industry in Saskatchewan. Saskatoon is host to over 30 biotechnology related companies and has great community, provincial and federal support. Sask Polytech students are hired by many of these local companies. The

Figure 3.4: Blaine Chartrand Sask Polytechnic Bio Science Technology Program head

The next speaker the viewers are introduced to is Janice Tranberg, who is presented as the executive director for SaskCanola, the core funder of the film. Additionally, Tranberg also served on the boards for Western Canada, Crop Canada and Ag-West Bio as Figures 3.5, 3.6, 3.7 demonstrate (www.linkedin.ca; www.agwestbio.ca).

Janice Tranberg

Executive Director at SaskCanola

Saskatchewan, Canada | Food Production

Current	SaskCanola, Government of Saskatchewan
Previous	CropLife Canada
Education	University of Saskatchewan

Figure 3.5: Janice Tranberg SaskCanola Director

Experience

Executive Director

SaskCanola

November 2017 – Present (3 months)

ADM Regulatory and Innovation, Agriculture Ministry

Government of Saskatchewan

January 2014 – Present (4 years 1 month)

VP Western Canada

CropLife Canada

2007 – 2013 (6 years)

Figure 3.6: Janice Tranberg LinkedIn profile

Janice Tranberg
Communications Director
Ag-West Bio Inc.
Janice Tranberg

Figure 3.7: Janice Tranber Ag-West Bio Director

Brett Halstead is presented as a farmer in the film, but he is also on a number of boards not made apparent in the film. He, like others in the film, finds himself on the board of directors for SaskCanola at the time of *License to Farm*'s release, shown in Figure 3.8 (www.saskcanola.com). In addition to this, Halstead has also served on the boards for Canadian Canola Growers Association, Canola Council of Canada, and Agricore United (now Viterra), which is shown in Figures 3.9, 4.0, 4.1, (www.twitter.ca; www.openparliament.ca; www.canolacouncil.org). His involvement in the industry goes beyond simply being a farmer yet being a farmer and only a farmer is how he is presented in the film.

Figure 3.8: Brett Halstead Twitter profile

Figure 3.9: Brett Halstead Canola Council of Canada board member

The board elected Jack Froese from Winkler, Manitoba to serve as President and Bernie McClean from Glaslyn, Saskatchewan to be Vice-President. Accepting his role as President, Froese thanked retiring CCGA President Brett Halstead for his service.

Figure 4.0: Brett Halstead Canadian Canola Growers Association board member

On February 23rd, 2017. [See this statement in context.](#)

February 23rd, 2017 / 11 a.m.

Brett Halstead President, Canadian Canola Growers Association

Figure 4.1: Brett Halstead President of Canadian Canola Growers Association

The final speaker in the film is Terry Youzwa, also presented as a farmer. He too is found on the board for SaskCanola at the time of the release as shown in Figure 4.2 (www.cerealscanada.ca). Additionally, he has been on boards for Agricore United, and Canola Council of Canada shown in Figures 4.3, 4.4 (www.marketwired.com). In the film we only see Youzwa as a farmer and nothing more.

Terry Youzwa

Producer representative from Saskatchewan

The family farm, Youzwa Farms Inc. is located at Nipawin, Sask. In the quest for a margin they grow canola, wheat, peas, faba beans, oats and canary seed. Terry was a pedigreed seed grower for over 25 years.

Terry graduated from Agricultural Engineering at the U of S. In 2006 he completed the The Directors College program and became a Chartered Director. Terry served as a director and Sask Vice-chair for Agricore-United and United Grain Growers from 1990-2007. He has served on the Soil Conservation Council of Canada and the Flax Council of Canada. In 2009 Terry joined SaskCanola for 8 years as a Director and a past chairman. He represented growers interests at the Canola Council of Canada for 7 years where he is also a past chairman.

Figure 4.2: Terry Youzwa SaskCanola board member

February 11, 2005 17:34 ET

Agricore United Elects New Chair and Executive Committee

NEWS RELEASE TRANSMITTED BY [CCNMatthews](#)

FOR: AGRICORE UNITED

TSX SYMBOL: AU.LV

FEBRUARY 11, 2005 - 17:34 ET

Figure 4.3: Terry Youzwa Agricore United board member

Three other directors re-elected to the executive committee are Maurice Lemay of Tangent, AB as Alberta Vice Chair, Terry Youzwa of Nipawin, SK as Saskatchewan Vice Chair and Robert Pettinger of Elgin, MB as Manitoba Vice Chair.

Agricore United is one of Canada's leading agri-businesses. The prairie-based company is diversified into sales of crop inputs and services, grain merchandising, livestock production services and financial markets. Agricore United's shares are publicly traded on the Toronto Stock Exchange under the symbol "AU.LV".

Figure 4.4: Terry Youzwa Agricore United board member

The point in conducting this more comprehensive look into the speaker's backgrounds is to uncover how and where these vested interests lie. The documentary is portraying representations of expertise specifically to persuade the public on the safety of industrial agriculture. In presenting the speakers specifically as "farmers" in the film, but obscuring how they are also well connected in the corporate agricultural industry sector, the viewer is left only seeing a partial view of the story. The framing of the speakers as just farmers portrays a very

different picture for the viewer had their business experience be shown. Therefore, it is clear that the representations of expertise are used in a particular way to endorse a specific message, being that industrial farming is safe because farmers themselves are freely discussing its safety. But of course, what the viewer does not see is that those “farmers” are also on the boards of several industry associations as well as the core funder of the documentary itself!

Doyle Wiebe	Farmer
Stan Jeeves	Farmer
Cherilyn Nagel	Farmer
Dale Leftwich	Farmer
Ian Epp	M.S.C Candidate at University of Saskatchewan
Dr. Joe Schwarcz	Director of McGill University Office of Science & Society
Megan Madden	Consultant South Paw PR Inc.
Tom Wolf	President of Agrimetrix Research and Training
Val Wiebe	Farmer
Lyndsey Smith	Editor Real Agriculture
Sharon Heading	Concerned consumer
Mark Lynas	Environmental activist, Author of <i>The God Species</i>
Dr. Wilf Keller	President of Ag-West Bio
Blaine Chartrand	Program Head Sask Polytechnic Bio Science Tech. Program
Janice Rushdy	Concerned consumer
Janice Tranberg	Executive director SaskCanola
Brett Halstead	Farmer
Terry Youzwa	Farmer

Figure 4.5 demonstrates the order of speakers in the film and their associated title.

Keywords

To further contextualize my findings discussing the narrative and language used during the documentary I compiled a list of words that would demonstrate the patterns present as shown in Figure 4.6. The table below quantifies the number of times each word was spoken keeping in mind that I also counted implicit mentions of the terms listed. An example of this would be if a speaker discussed how growing more food with less land is possible with innovations and is better for the environment, I counted that as being efficient.

Term	# of times mentioned	Notes
Industrial	9	All positive
Organic	8	3 mentioned organic in a positive way 5 mentions were equating organic as not better but worse for environment
Safe	25	All promoting how safe our food and practices are
Experts	2	Once by narrator, Once by Mark Lynas
Knowledge	3	All implicit mentions
Trust	3	All addressing that people “trust” farmers
Efficient	6	All equated to industrial farming
Sustainable	4	All in relation to industrial farming
Educate/learn	14	A mix of implicit and explicit mentions
Fear	7	6 concerning public fears 1 from farmer discussing fear of losing ability to make own farming decisions.

Figure 4.6 dominant terms used in the film

Finally, this last table demonstrates the particular narrative being pushed through the film, which shows what message the viewer is largely hearing and how it is geared towards a particular ideology.

Narratives	Amount
How many times industrial farming is portrayed as positive?	46
How many times is industrial farming compared to alternative ways of farming organic farming?	3 times – All referencing to organic farming.
How many times are representations of expertise used to promote industrial farming?	25
How many times are representations of expertise used to discredit concerns of industrial farming and points made of alternative approaches to farming?	25
Representations of expertise Male vs. Female	11 males, 4 females

Figure 4.7 Dominant ideologies presented in the film.

License to Farm Website

The documentary is accompanied by a website to further expand the reach of the campaign. When arriving on the main page, the visitor is greeted with the documentary itself along with the saying “Building Trust One Acre at a Time” as shown in Figure 4.8 (www.licensetofarm.com). The very first thing you see once the website loads is how this is a discussion about building trust. The message being pushed through is that people are misinformed and that the pushback can be resolved by educating the public. Industrial farming is portrayed as positive and alternative ways of farming are either left out (website) or portrayed as less than (documentary). Indeed, the website has a number of ways in which it continues to push a positive message about industrial. For example, Figure 4.9 shows the screenshot of the “About” section, which discusses how farmers are now using more “efficient and sustainable practices than ever before,” and “when did fear begin to trump science and fact when it comes to food production?” (www.licensetofarm.com). Here we are given a message that modern farming is the best that farming has ever been and better for the environment by being more “efficient and sustainable” (www.licensetofarm.com). Additionally, the website positions this lack of trust being rooted in fear, which is mentioned several times in the documentary. Therefore, we are seeing that the conversation from the License to Farm campaign being that consumers are simply

acting on emotion and not listening to the science. This represents power relations at play because it is delegitimizing concerns and describing them as being based in emotions.

Figure 4.8: License to Farm website still

Figure 4.9: License to Farm website still

In addition to the content found on the main page, there are various resources promoted by the website to further reinforce the message. For instance, there are a number of social media accounts associated with the campaign (Figures 5.0, 5.1, 5.2, 5.3), including Facebook, Instagram and Twitter (www.licensetofarm.com; www.facebook.com; www.instagram.com; www.twitter.com). Most of the content found on all the platforms is posted by License to Farm campaign. Twitter has the most diverse content. Though the content is still heavily posted from the @licensetofarm account, there is a range of activity from other accounts. However, most of what others are posting is in opposition to what the License to Farm campaign promotes. When looking up the hashtag (#licensetofarm) associated with the campaign this becomes evident (www.twitter.com). Looking through the top fifty posts, the majority of the content posted from sources outside of the @licensetofarm account are in opposition and not in support of the License to Farm campaign; Figures 5.4 to 8.6 in the appendix, demonstrate this (www.twitter.com).

Figure 5.0: License to Farm website still

Figure 5.1: License to Farm Twitter

Figure 5.2: License to Farm Facebook

Figure 5.3: License to Farm Instagram

The social media platforms are added ways for the campaign to spread their message and show how the documentary is not an isolated entity, but and one of several different actants – like the website, the social media accounts, and the hashtag – that are involved in the persuasion process. Figure 8.7 provides a visual representation of the various ways the message is being pushed forward. Additionally, along with the social media platforms, the website also presents testimonials on the site itself of tweets showing support for the documentary, which is shown in Figures 8.8, 8.9, 9.0.

Figure 8.7: License to Farm campaign

Testimonials

Figure 8.8: License to Farm website still

Figure 8.9: License to Farm website still

Figure 9.0: License to Farm website still

Furthermore, the website promotes “screening in a box” as a resource for teachers to download and employ in their classrooms to educate their students on farming in Canada.

“Screening in a box” includes instructions of what the film is intended for, a synopsis of it, an accompanying list of discussion questions broken up by chapter for the students to answer, and a list of other resources for further research into the science behind agriculture (see Figures 9.1 to 9.8) (www.licensetofarm.com).

Thank you for requesting the *License to Farm* Screening in a Box. This short documentary originated from a gap we saw in the conversation about food; the need for factual information, for credible voices, and for Canadian farmers to demonstrate leadership in agriculture advocacy.

It is our hope that this film, along with the tools included, can be a helpful resource to you as you discuss Canadian agriculture and the importance of farmers’ role in the conversation about food and farming.

This film is intended to start conversations, so please take the opportunity to start one of your own. We have included discussion points to help guide you and your group, but feel free to add your own questions as they apply to your audience.

License to Farm is 30 minutes long and is broken into five chapters: Clouds on the Horizon, GMO Foods, Pesticides, The Romantic Ideal, and Credible Voices. Feel free to watch one chapter at a time and break for discussion, or watch the whole film before discussing.

Figure 9.1: License to Farm website still

I hope that License to Farm inspires you to tell your story, and to share the stories of your parents, grandparents, neighbours and friends. Conversations about modern agriculture and food are an essential part of maintaining the industry's social license to operate, and your voice is paramount in that endeavour.

We look forward to hearing how you enjoyed the film and what discussions followed. Let us know on social media by tweeting us (@licensetofarm) or writing us on Facebook (License to Farm)! If you have a great farming story to share, send us a note at licensetofarm@gmail.com.

Thank you and happy viewing!

Janice Tranberg
Executive Director
SaskCanola

Figure 9.2: License to Farm website still

ABOUT THE FILM

Canada is a world leader in agriculture and food production. But farming doesn't look the same as it did 100, 50 or even 10 years ago. Farmers are producing more with less, using more efficient and sustainable practices than ever before. So why do consumers carry so much doubt around the way their food is produced? When did fear begin to trump science and fact when it comes to food production – and how do we earn back that valuable consumer confidence?

License to Farm is a 30-minute documentary aimed at empowering farmers to join the conversation about how food is produced – from technology to food safety, science to the environment. The film features conversations with farmers, scientists, professors, consumers and environmentalists on the importance of earning social license in modern agriculture production.

Figure 9.3: License to Farm website still

Directed and produced by Berteig Imaging, License to Farm is supported by the Saskatchewan Canola Development Commission (SaskCanola), the Government of Saskatchewan, and the Government of Canada through Growing Forward 2, a cost-shared partnership between federal, provincial and territorial governments designed to support an innovative, competitive and profitable Canadian agriculture and agri-food sector.

It is crucial for agriculture – particularly farmers – to take a seat at the table when it comes to conversations about food. Farmers can play a crucial role by engaging in meaningful conversations, opening the doors to their livelihood, building trust with their communities and confidence in Canada's world-leading food system.

Figure 9.4: License to Farm website still

LICENSE TO FARM DISCUSSION AID

FILM CHAPTER QUESTIONS

1. Clouds on the Horizon:

- a. What does the future of Canadian agriculture look like to you?
- b. Why do you think the general public has grown increasingly concerned about their food supply?
- c. Do you see consumer interest in food and farming as a challenge or opportunity for farmers?

2. GMO Foods:

- a. If you grow GM crops (canola, corn, soybeans, or others), why do you choose to? What are the benefits to the farmer and the consumer?
- b. Who do you think is a credible source of information on this topic?
- c. What are some of the biggest misconceptions or concerns you think people have about GMOs?

Figure 9.5: License to Farm website still

3. Pesticides:

- a. What are the main insect pests and diseases facing farmers today? What are the implications of those pests not being controlled?
- b. What's one thing you would like non-farmers to know about how you use pesticides on your farm?
- c. What steps do you take (or are taken on the farm and in the agricultural sector) to ensure that pesticides do not enter the food supply?

4. The Romantic Ideal:

- a. Do you think the “romantic ideal” of farming has a negative effect on agriculture’s social license? How so?
- b. What new technologies are being used on farms today making them more environmentally responsible and sustainable?
- c. What is the “image” of farming you want non-farmers to have?

Figure 9.6: License to Farm website still

5. Credible Voices:

- a. Who do you think is the most trusted source when it comes to information about food? Why?
- b. How can farmers become a more credible and trusted source among consumers?
- c. What's one thing you want every consumer to know about the way you produce food on your farm?

ADDITIONAL FILM QUESTIONS

- 1. How would you define social license in agriculture?
- 2. What do you think motivates consumers to make certain choices when buying food?
- 3. Who else do you think should see this film? How should the film be used in the future to propel conversations?
- 4. What steps can farmers take to increase dialogue with non-farmers and improve their social license to operate?

Figure 9.7: License to Farm website still

RESOURCES

We have included the following list of resources to guide you as you continue to research the science in agriculture. These links are not endorsements nor affiliates of License to Farm or SaskCanola, but rather resources we think you may find helpful as you continue this discussion. If you have resources to add, please let us know at licensetofarm@gmail.com.

[Agriculture in the Classroom Canada](#)

[Agriculture More Than Ever: Resources](#)

[Biology Fortified](#)

[Farm & Food Care Canada](#)

[GMOAnswers](#)

[University of California Biotech: Resources](#)

Figure 9.8: License to Farm website still

The website also lists the organizations the film is produced by, as seen in Figure 9.9 (www.licensetofarm.com). Among them, SaskCanola is the main funder and the rest are the federal (Government of Canada) and the provincial government (Growing Forward 2 & Government of Saskatchewan) (www.licensetofarm.com). Furthermore, the “resources” tab lists additional organizations for consumers to look into for further information on Canadian agriculture. However, as Figure 10.0 shows, the page specifies that the resources are in no way endorsements or affiliates of *License to Farm* or SaskCanola. By linking to other organizations, there is an even broader scope to the message being pushed because these organizations will be in line to the License to Farm campaign narrative. Indeed, Farm Food Care Canada is listed.

Figure 9.9: License to Farm website still

Additional Resources

We have included the following list of resources to guide you as you continue to research the science in agriculture. These links are not endorsements nor affiliates of License to Farm or SaskCanola, but rather resources we think you may find helpful as you continue this discussion. If you have resources to add, [please let us know](#).

[Agriculture in the Classroom Canada](#)

[Agriculture More Than Ever: Resources](#)

[Biology Fortified](#)

[Farm & Food Care Canada](#)

[GMOAnswers](#)

[University of California Biotech: Resources](#)

Figure 10.0: License to Farm website still

SaskCanola Website

Providing an overview of SaskCanola is imperative to further understand the vested interests at play in the *License to Farm* documentary as they funded \$150 000 of the \$200 000 project, making them the core funder (Allen, January 20 2016). For this section, I examined what the organization focuses on, and where they get their funding.

SaskCanola is a producer-led organization, established in 1991 (www.saskcanola.com). The website's description of their funding states, "A 75 cent (\$0.75) per tonne levy on Saskatchewan produced canola is collected by buyers at the time of sale and forwarded to SaskCanola. The levy is refundable upon request by the producer" (www.saskcanola.com). SaskCanola focuses on advocacy, research and market development to support canola producers in the region (www.saskcanola.com). Additionally, they have a list of partnerships, of which

Farm & Food Care Saskatchewan (branch of Farm & Food Care) is among those represented (www.saskcanola.com). This is represented in Figures 10.1 to 10.2.

Welcome to SaskCanola

SaskCanola (Saskatchewan Canola Development Commission) is a producer led organization, established in 1991 and supported by some 23,000 levy-paying Saskatchewan canola producers.

Vision: Growing producer prosperity.

Mission: To provide value to canola producers through advocacy, research, & market development.

Leadership

An eight member Board of Directors oversees SaskCanola. They are producers who strongly believe in the potential that canola holds on the world stage.

Funding

A 75 cent (\$0.75) per tonne levy on Saskatchewan produced canola is collected by buyers at the time of sale and forwarded to SaskCanola. The levy is refundable upon request by the producer.

Figure 10.1: SaskCanola website still

Levy Dollars at Work for You

The levy of 75 cents per tonne sent to SaskCanola, and administered by the producer-led board of directors, helps your canola business:

- further explore and secure canola markets for producers nationally and internationally;
- continue agronomic success, by working on important research that benefits producer profitability;
- acquire the latest crop and farm business information through communications programs and services.

The Canola Value Chain

SaskCanola is a core funder of the Canola Council of Canada and member of the Canadian Canola Growers Association. SaskCanola also works in collaboration with the other provincial canola producer organizations. [Click here](#) to read more about the canola value chain.

SaskCanola Regulations

All agri-food agencies in Saskatchewan, including SaskCanola, are supervised and monitored by Agri-Food Council. Council members are appointed by the Lieutenant Governor in Council, and are accountable to the Minister of Agriculture. SaskCanola is governed by the [Saskatchewan Canola Development Plan Regulations](#).

Figure 10.2: SaskCanola website still

It is also important to note that though this is a Canadian industry association, there is a strong emphasis on international market growth and export. For instance, under the ‘State of the Industry’ tab, it states, “Canada exports 90% of its canola as seed, oil or meal to 55 markets around the world,” which suggests that their agenda is not about feeding Canadians but growing profits by participating extensively in international markets. The documentary however, portrays this idea of family farms still being strong and active, which could lead the viewer to understand industrial farming crop production in Canada to be for Canadians and not for export. For example, statements in the documentary such as, “how is it that this food comes to be on my plate,” or “it’s really important for us to let consumers know what it is that we’re doing, and just how safe their food is,” signals to the viewer that the food grown in Canada is actually for

Canadians and not for export, when this is not the case at all. Additionally, in SaskCanola's latest annual report for 2016/2017 it states that

In September of 2016, Executive Director Janice Tranberg travelled to Korea and China on a trade mission with Premier Brad Wall, Saskatchewan Trade and Export Partnership, and several Saskatchewan based companies looking to build new markets. She presented in Seoul, South Korea, and Qingdao to increase awareness of Saskatchewan and western Canada as a leading premium, quality supplier of grains, pulses, and oilseeds in the Asian market. (Annual report 2016/17, 2018)

This further demonstrates how SaskCanola's agenda is very much fixed in growing export and profits and not necessarily in feeding Canadians. Being that SaskCanola is the core funder of the documentary, it makes one question the influences of the License to Farm campaign. Indeed, it brings up questions of whether those involved in the campaign are really trying to educate the public or trying to secure their corporate interests.

The analysis of all these components presents a different view of the documentary since it becomes apparent that a particular group of people were chosen to speak in the film, a group whose backgrounds are predominantly situated in industrial farming. Left out are speakers with ties in other forms of farming like agroecological farming, or speakers who simply do not have ties in industrial agriculture in order to show a more balanced view of farming as a whole. This helps us to see how only a partial view is presented and that there are power relations at play in attempting to persuade the public using a "social license" approach. In the following chapter, I discuss the implications of these observations and link my findings back to the literature and theoretical concepts highlighted in the first two chapters of this study.

Chapter 4: Discussion

This project key concern is to investigate the License to Farm campaign for the ways in which representations of expertise are being used to legitimize dominant agricultural practices in Canada. Specifically, the project seeks to understand how those representations support industrial farm practices, while downplaying the social and environmental concerns associated with such farming. I have employed a STS framework and found that the social license approach is applied as a PR tactic to persuade rather than to educate, even though the License to Farm campaign suggests that its purpose is to educate the public. Through my research, I have identified how representations of normative scientific expertise within the campaign enable a particular narrative of industrial farming while other forms of agriculture and concerned consumers are downplayed as unscientific and thereby illegitimate. This chapter will unpack my analysis using the following key concepts that I identify from the dataset: representation of expertise, power relations, construction of knowledge, control of nature, and social license.

At the end of this chapter, I also discuss the implications of my findings, how the key STS concepts help us interpret those findings, and how this project contributes to the larger field of the study agricultural politics. Additionally, I identify the constraints present in my research and areas needing further research.

Representations of expertise

In Chapter 1 I discussed representations of scientific expertise, which are commonly employed to legitimize particular practices or ideas. In the License to Farm campaign, the same strategy is used to legitimize industrial farming. The representation of expertise in the campaign, and especially in the film, is significant because of the message being pushed forward; that industrial farming is not a practice to be concerned about and that it should be embraced as the

best agricultural method. In fact, other methods are not even discussed, and industrial farming is referred to simply as “farming”, equating any opposition to industrial practices to opposition to farming as a whole. The campaign employs a representation of scientific knowledge as the superior knowledge that is divorced from feelings or interests and instead produces facts and truths. Scientific knowledge is generally what the public turns to when there is controversy on any subject because science is largely regarded as an unbiased source of truth. However, what the STS perspective offers is a view to how the production of scientific knowledge is a social process performed by social actors, which cannot be removed from their social context.

Summerson Carr argues that expertise is not something someone *has* but it is something someone *does* and is constructed through language use, appearance, and gestures, as well as titles (2010). *License to Farm* exhibits the construction of expertise in all these in all these categories. For instance, through language, the film frames the public concern as irrational and ignorant of the science. Moreover, the clothing choice (business attire or plaid) and scenery (office space or fields/greenhouses) nudge the viewer to not only view the speakers as professionals (in the office location), but also as caring individuals who also happen to be experts (in a field or greenhouse location). As discussed below, these characteristics also inform the concepts of power relations, construction of knowledge, control of nature, and social license.

Appearance

The way in which appearance is used to legitimize the messages in the film is revealed through gender, attire, and farming. As shown in Figure 4.5 of Chapter 3, there are 11 males included as speakers compared to only 4 women represented as experts. The public tends to perceive males as worthy of being taken more seriously than women, especially in aspects concerning science (Stamm, 2010; Kiser, 2015). Though there is no way of knowing if this was a

deliberate decision on part of the film producers, the end result remains that having more males than females can help to appeal to dominant ideology of men being experts.

All the speakers are dressed in either business attire or plaid shirts. Business attire stands for authority and expertise (Figures 10.3) whereas plaid shirts are a cliché farmer aesthetic of simple, practical, and durable clothing (Figures 10.4, 10.5). The clothing choice demonstrates that those in business attire are authority figures and professionals, which ought to be trusted in relaying accurate factual information. The plaid clothing choice helps the viewer see the speakers as real farmers who work the land and sees first-hand the benefits of industrial farming. There is an effort to portray the farmer as both an expert in the field, but also a down to earth, simple lifestyle holder, and similar in social status to laypeople who are the presumed audience. By positioning the farmer as both an expert and equal to laypeople, the viewer is more likely to believe in the message they are putting forward (safety and sustainability of industrial farming) because they can see themselves in the farmer more so than, say, in Dr. Joe Schwarcz, Director of McGill University's Office for Science & Society.

Figure 10.3: *License to Farm* documentary still

Figure 10.4: *License to Farm* documentary still

Figure 10.5: *License to Farm* documentary still

In addition, the backdrops for speakers are carefully selected to frame them in particular way. Nine out of the 15 expert speakers have a backdrop setting that looks like some type of office space (Figure 10.6, 10.7) or lab area (Figure 10.8). Along with the clothing attire, the backdrops help the viewer to see these speakers as professionals. The viewer can then associate these speakers as experts in their field who present factual information. The viewer is urged to

see these speakers as important authority figures because of the backdrop they are presented in. This can further be understood when comparing the backdrop to the concerned consumers, who appear in a parking lot in the middle of the day. This backdrop works to associate the concerned consumers as homemakers and not professionals, whereas the backdrops of the experts works to associate them as authoritative professional individuals whose area of focus is the food industry, therefore, making the viewer more likely to believe what they have to say.

Figure 10.6: *License to Farm* documentary still

Figure 10.7: *License to Farm* documentary still

Figure 10.8: *License to Farm* documentary still

Figure 10.9: *License to Farm* documentary still

Moreover, some backgrounds demonstrate greenery and what appears to be a greenhouse of some sort; there are also speakers who are speaking directly outside in a field with greenery as a backdrop (Figures 10.5, 10.4). Four speakers are presented with a greenery backdrop; two are farmers and are outside in an actual field (Figures 10.5 and 10.4), and the other two appear to be near a greenhouse (Figures 10.9, 11.0).

Figure 11.0: *License to Farm* documentary still

Doyle Wiebe and Stan Jeeves are the two speakers in a field and they are both presented as farmers in plaid shirts. The associations the viewer is pressed to take is that a farmer is one with nature and knows how to steward and nurture the land and its greenery. The viewer is made to see how farmers care about their land rather than seeing industrial farmers as practicing the control over nature due to all the potentially harmful steps, which take place in the vast number of monocrops (one crop) likely grown with heavy use of chemicals. The viewer is not made to see that, but is made to think of farmers as laypeople, who know their land and will do what is best for it. Indeed, the farmers are not presented with their industry associations, which they all have as shown in Chapter 3. I argue this works to see the farmers as only farmers and remove any possibility to see their vested interest like legitimizing industrial farming market in Canada.

By obscuring these associations, the viewer is simply urged to see the farmer as a carer of the land.

Dr. Wilf Keller and Mark Lynas are the other two speakers presented with a greenery backdrop, however, this time it appears as a greenhouse. This greenery presses the viewer to also view those not represented as farmers as similarly caring for the environment. The vivid green from the plants, signifies life and thus the viewer is led to associate the speakers as working to bring more life rather than destroying it through industrial practices. This makes it easier for the viewer to think that industrial farming practices are actually in place to protect the environment rather than a means to economic ends.

Language

Language use is another way to enforce the authority of experts in the documentary. The language used in *License to Farm* focuses on science. It is clear that positive connotations are used to describe proponents of industrial farming (i.e. creators of the campaign), and that negative connotations are used to describe the consumer. The speakers continuously delegitimize consumer concerns by relating it back to science. For example, when Megan Madden discusses where consumers get their information from she states, “they’re researching those aspects of agriculture but what they’re finding isn’t always true, isn’t always scientific and for the most part is not directly from the source” (*License to Farm*, 2016). In this statement, Madden is making an association with the idea that getting information based on science is the only way to get the correct information. There is clear evidence that the documentary is positioning scientific knowledge above all else because within the first minute of the film, the narrator already describes technological advancements in terms of “cutting-edge technology,” and “breakthroughs in genetics” (*License to Farm*, 2016). Moreover, the narrator then credits the

variety of food we now have, the reduced environmental impact, and the sustainability of industrial farming practices, to these technological and scientific breakthroughs such as GMO. The viewer is thus already persuaded to adopt this ideal of scientific knowledge as being inherently good. As discussed in my literature review, Bronson exemplifies how this scientific knowledge is typically valued above other forms knowledge (laypeople, traditional knowledge, etc.) considered to be non-expert knowledge (Bronson, 2014). In the first chapter of the film there is a discussion about consumers conducting their own research and that “it isn’t always scientific” (*License to Farm*, Ch.1, 2016). By stating this, the speakers are implying that consumers are not smart enough to do proper research and that if it is not scientific, it does not have value. Furthermore, stating this implies that consumers need to turn to the experts to inform them.

Along with focusing on science, the language use in relation to modern agriculture is predominantly positive. This includes, words such as: viability, health, necessary, revolutionary, breakthroughs, needed, safe, sustainable, efficient, sophisticated, strict, and thorough (*License to Farm*, 2016). For example, when Cherilyn Nagel states “we wouldn’t use a chemical product on our crop if it didn’t need it...but rest assured the products we are using are specific and necessary for the viability and health of that plant” (*License to Farm*, 2016). Likewise, when Dr. Wilf Keller states “I feel very positive about the sustainability of our agricultural systems using these new technologies (biotechnologies)” (*License to Farm*, 2016). This language use helps to solidify the representation of expertise since the use of those words carries positive connotations. It also helps convince the viewer that the speakers are providing scientific facts, rather than relying on emotions.

When discussing consumer concerns, the language use is largely focused on their emotions. Indeed, the word “fear” is used six times in the 30-minute film to explain the origin of consumer concerns. Additionally, Dr. Schwarcz also uses terms like “bewildered” and “confused” to describe how consumers are coming to their conclusions on industrial farming. There is even an entire chapter of the film dedicated to the romantic ideal of farming, which suggest emotional ties to the idyllic farm. Indeed, this chapter focused on consumers being fearful, and reluctant to accept the move from smaller family farms to large scale industrial operations. For instance, Dale Leftwich even describes this concern due to people not liking or wanting to see change in their food production (*License to Farm*, 2016). Moreover, Leftwich compares this reluctance to accept change, with a phone analogy. He states,

A lot of people would be really, really be insulted if you told them they had to put away their iPhone and they had to go back to a phone you actually turned the crank on in order to get three rings, so their idea is that farmers will continue to use the technology that was around when the phone was a crank phone. (*License to Farm*, 2016)

That statement alone, suggests that consumers as simply being difficult and unwilling to accept change, effectively removing any rational basis for the concern. Additionally, Leftwich exaggerates the concern by making it seem like consumers are not accepting of any new technology and will only be satisfied with outdated farming technologies. The speakers are depicting consumers as irrational, misinformed people who are backward facing rather than progressive. The consumers’ concerns are not discussed as being based in science but completely based in emotional responses such as fear, and on information that is irrational and incorrect, like the safety of GMO. Therefore, the consumer is constructed as not being smart enough to decipher the vast amount of content to present legitimate concerns, and therefore, their reasoning

cannot be trusted. Positioning consumers in such a way makes it possible for the documentary to represent their speakers as experts properly educating the public on Canadian agriculture through facts.

Indeed, the representation of expertise treats scientific knowledge as the ultimate truth and not part of a social process as Latour and Woolgar discussed (1986). Rather than seeing facts as being constructed, the film instead presents facts as if they are in nature waiting to be found by scientists, and indeed that they were found. There is a general understanding from society to trust in the facts. Indeed, when discussing any kind of controversy in media, we use facts to leverage one side over the other. The facts that get discussed are predominantly based on scientific information as the dominant consensus on science is that it produces truths. The public views facts as unbiased, value free, based on reality and not part of a social process. When the public already views the production of scientific knowledge equal to the producing truths, it is much easier for them to accept representations of expertise as similarly presenting truths because of their association to science. An STS lens highlights the inherent social process involved in producing facts. This perspective opens the black box (what is left out from public view when presenting these facts), such as the process through which a fact is constructed. When facts are presented as already existing in reality and not as contingently real, it is easier to make them pass as value-free. However, as Latour and Woolgar note, “an important feature of fact construction is the process whereby ‘social’ factors disappear once a fact is established” (Latour & Woolgar, 1986, p.23). How a fact is constructed (scientists create them) versus how a fact is presented (being out in nature waiting to be found) are two different things according to Latour and Woolgar. The construction process is left out or black boxed, and the public is thus not exposed to the social process of scientific production of knowledge. Yet the documentary presents facts

as very much being in nature waiting to be found. Repeatedly the speakers position consumer concerns as not being based on science, and that scientific information is the only way to get the truth. Science and facts are only presented as entirely accurate sources for information and completely removed from biases. This helps the documentary present the speakers as only speaking from truths and not vested interests.

An STS framework is crucial in challenging this dominant notion of science precisely because it understands science as an active process. The general consensus and understanding of science is that it is superior to any other field that helps to explain the way the world works. Western society positions scientific knowledge as the knowledge base, which all other knowledge bases such as traditional, get compared to. This superiority is then exploited by employing different techniques such as showing representations of expertise wearing a suit, or a lab coat, working with beakers in a lab to demonstrate how it is superior in its practices. In this campaign, there are indeed vested interests at play (securing industrial farming's dominant status in the agricultural industry). First, only a partial controlled view of farming is expressed by only discussing industrial agriculture and not alternative production methods. The perceived superiority of science and consequently representations of expertise are used to leverage these interests, by using specific tropes like business attire, or the backdrop of a scientific lab. These tropes work at constructing a view of industrial farming as supported by value-neutral science, while obscuring the political and economic interests behind the campaign. By associating scientific knowledge with industrial farming, there is less chance of a pushback due to the consensus of science as superior. However, having an understanding of how STS challenges the idea of expertise as necessarily value-neutral and automatically authoritative, we can see how there are biases present in this campaign and there are power relations at play. Questioning the

automatic authority of expertise, makes room to uncover the vested interests, which are otherwise well hidden by ability of those in power to obscure the interests through the exploitation of the superiority of science.

Power Relations

Power relations, specifically in the form misleading consumers, are present within this campaign. Power relations are disclosed in the way representations of expertise are mobilized to legitimize industrial farming. For instance, the speakers continuously reference scientific knowledge, they dress in a particular way that connotes authority, they construct consumers as uneducated, misinformed, irrational and emotional. Additionally, and discussed below, the title of “Farmer” associated with a selection of the speakers in the film further embodying power relations because of the deliberate decision to present them as such, whilst not revealing their other affiliations in the industrial farming sector.

The titles work in two ways. The first being that Val and Doyle Wiebe, Stan Jeeves, Cheryl N Nagel, Dale Leftwich, Brett Halstead, and Terry Youzwa are all listed as “farmer.” Interestingly, the fact that these speakers are only made to be viewed as farmers, does demonstrate power relations in the way that they are specifically presented as such and their corporate associations to SaskCanola for example, are obscured. To represent these individuals only as farmers while not making apparent their ties to industry associations (SaskCanola, Canadian Canola Growers Association) demonstrates the manipulation of the discourse, which Van Dijk discusses as power relations. The power relations and subsequent misleading is observed in what is presented but also in what is left out. For example, though the titles provide the viewer with representations of expertise, which is understood as a person of authority and power, the titles also demonstrate power because of what is left out (all those represented as

farmers and nothing else). The deliberate decision to only present these speakers as farmers presents a partial and biased view. Herein lie the power relations precisely *because* of the decision to portray these speakers as nothing other than farmers, but as shown in Chapter 3, they are all affiliated in some way to large agricultural organizations focused on industrial farming including Canola Council of Canada, Canadian Canola Growers Association, SaskCanola, etc. Furthermore, Wiebe, Youzwa, Halstead and Leftwich have all been on the board of the core funder for *License to Farm*, SaskCanola. As Van Dijk (2008), Wodak & Meyer (2001), and Foucault (1980) discuss, the power is present in the manipulation of social dominance of one group over the other. Meaning that those who support the dominant ideology, have more power because it is the widely held consensus and therefore, can easily manipulate those who challenge it. In this campaign the dominant ideology of industrial farming as safe, is protected from being questioned. Because industrial farming is already the dominant farming practice, there is a lot of power behind the ideals of this farming method because it is the dominant practice with support from large highly profitable corporations. Moreover, because of the distancing in our food system, it makes it easier for proponents of industrial farming to manipulate the message to their liking and present industrial farming as efficient, sustainable, safe, environmentally friendly, because the public does not already have a comprehensive understanding of the food system. Thus, making it easier for proponents (speakers in the campaign) to manipulate the narrative to fit their agenda while seemingly appearing to genuinely be concerned with educated and perceived uneducated public. For example, by attempting to appeal to viewers by presenting particular speakers (namely the farmers) as socially equal to concerned consumers. As discussed by Glaeser et al. (2000), the public is most likely to trust in someone most similar to themselves.

Therefore, this decision is taken deliberately to persuade the public by positioning these particular speakers as farmers.

Secondly, the titles given to Epp (M.S.C Candidate at University of Saskatchewan), Schwarcz (Director of McGill University Office of Science & Society), Wolf (President of Agri-Metix Research and Training), Lynas (Environmental activist, Author of *The God Species*), Keller (President of Ag-West Bio), and Chartrand (Program Head Sask Polytechnic Bio Science Tech. Program), are representative of authority figures with scientific knowledge. Similarly, this also demonstrates power relations in the way these titles represent expertise because of their connotation to being educated, well-informed individuals. Titles such as Director., M.S.C Candidate, Author, President, all suggest a level of success, which can help the viewer associate the speakers as worthy of disseminating the campaigns message. Again, there are also obscured associations with these speakers, such as the speakers' ties to large biotech companies like Monsanto (Dr. Schwarcz), or Canola Council of Canada (Ian Epp), but they are specifically chosen to largely speak on the scientific knowledge of industrial farming and biotechnologies. Indeed, these speakers are predominantly those who speak on the scientific information in the film and all of them are male.

In Chapter 2, I outlined the ways in which Van Dijk discussed power as visible through discursive manipulation, misinformation, propaganda and other forms that illegitimately attempt to manage the minds of people (2008). Indeed, the campaign is presented as an educational tool through the social license approach because it aims to teach people on industrial farming practices in order to regain the public's trust and approval, which is essential when an organization, or industry loses their social license. By ignoring the public pushback, the Canadian modern farming industry would likely face financial and reputational consequences

because it relies on the consumer for its economic survival. However, what I have observed through my findings is that rather than being an educational tool, the campaign is instead a manipulative PR tactic to persuade the public of buying into industrial farming practices again. This is done using representations of expertise, who stand in for legitimate expertise in the way they dress (plaid and business attire), the backdrops (offices, lab, field), and the way they speak about science as the only source of legitimate accurate information. These tactics are applied and work in strategic ways to appease people's mistrust through the way they represent expertise in this campaign. The viewer is invited to trust the farmer as they are most like them and to trust that the "experts" are relaying truthful factual scientific information, which they have already positioned as superior knowledge. These power relations further inform the next concept of construction of knowledge.

Construction of Knowledge

The way in which this campaign constructs knowledge can be observed through the narrative as well as the patterns pushing for industrial farming in the film and accompanying resources. As Figure 4.7 highlights, the narrative surrounding industrial farming is only positive. Indeed, industrial farming is portrayed as positive 46 times in the 30-minute documentary. The viewer is exposed to this narrative more than once a minute throughout the film's entirety. Furthermore, alternatives like organic farming are only ever mentioned as less than industrial farming; such as when Lynas states that it is illogical for farms to transition to organic practices since it uses much more land and thus less environmentally friendly (*License to Farm*, 2016). The only time organic farming is mentioned as better is when concerned consumers speak about it. For instance, Sharon Heading states,

I would never intentionally buy a GMO. I avoid them at all costs... There's just too many things going on in the world with bees and butterflies and birds, and

crop failures; things that just aren't natural and I think we need to do things as naturally as we possibly can if we're going to let the world survive. (*License to Farm*, 2016)

However, the documentary works hard to frame the consumer and their concerns as being “not scientifically based,” “not always true,” and as “misinformed,” which inclines the audience to view the consumer as relying on unscientific information with irrational views and ideas about farming (*License to Farm*, 2016). Therefore, the viewer is nudged to not take the concerned consumers' comments seriously and rather to trust the “experts” in the film. In addition to this, the word “safe” is associated with industrial farming 25 times throughout the film. Again, this constructs a predominantly positive view of industrial farming and the viewer is urged to only perceive it as a great way to farm that is entirely safe.

As Coulthard & Caldas-Coulthard discussed, those who have active access to power, such as the speakers in the film, are in control of which ideology gets pushed forward (1996). This means that authoritative figures or people represented as “experts” have access to power in ways that a layperson does not because of the way society places value on authority and expertise. Therefore, those in power (authoritative figures, experts) are more often trusted than those who are not (layperson). This means that it is the ones in power who get to control the dominant ideology because they are largely unchallenged and when they are, they can usually secure the ideology by presenting information and people who are valued (scientific information, experts). This is exactly what we are seeing in this campaign. The dominant ideology on industrial farming as being safe, sustainable, and healthy is being challenged by the consumer who is pushing back against this dominant farming practice by starting to change their purchases to more organic, and local food supplies. As a result, the industrial farming sector and its proponents are manipulating the public by creating a narrative that attempts to convince the

public of industrial farming's safety and sustainability. It appears more like this campaign is working to maintain the status quo (Coulthard & Caldas-Coulthard, 1996) of industrial farming at the dominant farming practice to secure their economic benefit from it.

Those who hold more power, in this case industrial farming associations like SaskCanola, are also maintaining power by portraying all consumer concerns as based on emotions of fear and irrationality. The film suggests that consumers are uneducated on the facts and cannot be trusted to come to a rational consensus. By situating the foundations of the concerns (GMO, pesticide, and large scale farming) in these terms, the viewer is persuaded to disregard them. Using the terms like "bewildered" and "confused" positions the concerns as only based in emotions. It makes it much easier for the viewer to disregard these concerns as having no scientific basis.

Indeed, the dominant ideology is also pushed through in this campaign by positioning scientific knowledge above all other kinds of knowledge. For instance, the film discusses biotechnologies as revolutionary technologies that allow for sustainable agriculture. There is indeed no mention of other practices such as agroecological farming practices, small scale diversified farming, and other practices that have been shown to be sustainable (Altieri, Nicholls & Montalba, 2017; Frison, 2016; International Fund for Agricultural Development [IFAD], 2013). The film portrays biotechnologies as the way to feed the world, although there's a dearth of evidence that biotechnology has helped curb hunger and malnutrition. Moreover, as Altieri, Nicholls & Montalba note, "the challenge to align modern agricultural systems with ecological principles is immense, especially in the current context of agricultural development where specialization, short-term productivity and economic efficiency are the driving force" (Altieri, Nicholls & Montalba, 2017, p.13). They suggest that industrial farming's driving force is not to

feed the world and have sustainable agriculture, but to have short-term productivity and economic efficiency. This is entirely left out of the narrative in this campaign.

The additional resources associated with the campaign such as the social media accounts (Twitter, Facebook, Instagram) and the accompanying License to Farm website further reinforce the message of the film. The knowledge constructed here is again focused on industrial farming as positive and the License to Farm campaign is framed as one that *educates* the public on the safety and sustainability of industrial farming. The narrative is only positive, with phrasing such as “building trust” (Figure 4.8), “using more efficient and sustainable practices than ever before” (Figure 9.3), “confidence in Canada’s world-leading food system” (Figure 9.4). This phrasing is found throughout all social media platforms and the website itself, therefore, leaving little room for consumers to doubt the validity of the campaign.

The construction of knowledge to favour a particular ideology is not isolated to this campaign. Indeed, it can be studied in a vast array of topics, such as race, and gender. Edward Said in *Culture and Imperialism* (1993), discusses how colonial ideals are still found in many cultural forms to this day. Said’s work focuses on how popular works of literature encompass colonial ideals within their narrative and work to reproduce and maintain these ideals. He states, “the power to narrate, or to block other narratives from forming and emerging, is very important to culture and imperialism, and constitutes one of the main connections between them” (Said, 1993, p. xiii). This line of reasoning can be applied to the License to Farm campaign through the way those in power (actors involved in the campaign) dictate the narrative surrounding the controversy of industrial farming by positioning the concerns (GMO, pesticides, large scale farming) as being detached from scientific knowledge and rooted in fear. The message on the safety of industrial farming that is being pushed through is not neutral or unbiased but a partial

view that focuses on securing the dominant ideology, rather than discussing Canadian farming as a whole and the various practices that take place within it. Indeed, industrial farming may be the dominant practice, but it is not the only way to farm. The viewer is only subjected to viewing industrial farming as the best method of farming because no other viable farming method is discussed. In contrast, international evidence is growing that small scale, diverse agricultural practices can offer greater economic, social and environmental sustainability across the globe (Frison, 2016; IFAD, 2013); that this is not mentioned in the film is not a coincidence, but a deliberate decision made by the designers of the campaign.

There is a correlation between the License to Farm campaign and the public education model Callon discusses in “The role of lay people in the production and dissemination of scientific knowledge” (1999). Model 1 assumes the public is ignorant and needs to be educated, which is what is taking place in this campaign. The documentary and accompanying materials portray the public as being completely removed from institutional knowledge, which has a certain value over what ‘ordinary’ people know and understand; hence the need to educate the public. Moreover, the concerns brought up by the public are delegitimized on the basis of being rooted in emotions and irrational beliefs, which model 1 similarly discusses. This campaign seemingly makes no room for public deliberation or the co-production of knowledge. Rather it works to debunk public concerns by framing the issue as being entirely due to irrationality lack of education. Furthermore, model 1 predominantly places value on science, which gives rise to expertise and automatic authority. This theoretical contribution to the STS field further fits with my project as it allows for science to be viewed as a process of negotiation. Therefore, opening up a discussion that those working in scientific fields should not be blindly accepted as being inherently neutral simply because the field they work in is positioned as being, above all else,

objective. There are potential consequences to blindly accepting facts as inherently truthful, and the following section demonstrates this.

Control of Nature

STS scholars have discussed the concept of the control of nature. From Francis Bacon introducing ideas of domination against nature in the 17th century, these ideologies are now normalized and often taken-for-granted. This perspective underwrites the License to Farm campaign as well. There are undertones and narratives of the domination and control of nature found throughout the campaign. For instance, Nagel speaks of how pesticides and biotechnologies are tools that help to “control what nature produces” (*License to Farm*, 2016). Biotechnologies and pesticides are portrayed as positive tools, which are necessary to produce the variety of foods needed to feed the world despite research showing they have contributed to increasing environmental degradation (Losey, et al., 1999, United Nations Report, 2017). John Losey, Linda Rayor and Maureen Carter (1999) conducted a study, which showed how the development of *Bacillus thuringiensis* (Bt) resistant corn had significant negative impact on the survival of the monarch butterfly larvae, thus threatening the species. The transgenic corn was ostensibly developed to minimize the use of chemical intervention needed on the crop and was understood as a good technology reducing the risk from chemical bioaccumulation from pesticide pollution (Losey et al., 1999). However, an unintended consequence became apparent when more than half (56%) of monarch larvae species died when coming in contact with pollen from Bt resistant corn (Losey, et al., 1999). Monarch larvae feed exclusively on milkweed leaves, which frequently occurs in and around the edges of corn fields. This example is in contrast to the example the documentary presents.

The documentary presents GMO crops as genes that are introduced from one organism to another organism to enhance its nutritional value. The example used is of vitamin A deficient individuals in sub-Saharan Africa. The idea is that if a group of people are deficient in vitamin A, they can be given a crop that has been genetically modified to carry additional vitamin A, which would then improve their health. The documentary only portrays GMO's as a positive technology and then use select evidence to support their claims. Yet, as the Bt resistant corn example shows, this technology has broader environmental impacts that are left out of the discussion in the License to Farm campaign. GMO's, though safe to consume, demonstrate the possession and reification of nature by manipulating organisms to benefit humans, while not considering the environmental implications (Harraway, 2004; Merchant, 1989).

The ability for us to now take genes from one organism and introduce it to another, may seem harmless, but it demonstrates how as a society we have normalized the idea of changing the natural genetic make-up of our food to manipulate it for commercial profit. This implies that humans feel emboldened to change and manipulate anything on this planet to our will because we view nature as something we can control, rather than to live in balance with it. The environmental implications are not necessarily ignored, but not given the same attention as our perceived right to alter anything to benefit a handful of corporate interests. There is not a balanced relationship between humans and anything else we encounter on this planet because the dominant understanding is that of human superiority.

Our values as humans are often focused on pursuing economic gain, which is reflected in industrial farming practices. Monocrops, which are a product of industrial farming, do not allow for optimal nutrient recycling, due to the reduced amount of nutrients present in the controlled system of monocrops (Altieri et al., 2017). Similarly, diverse ecosystems are difficult to achieve

through monocrops because of the limited crop diversity. In a natural setting, monocrops would not exist, and we would be exposed to a naturally diverse ecosystem (Altieri et al., 2017). Moreover, monocrops make it difficult for balanced pest-natural enemy populations, which agroecological farming management would encompass (Altieri et al., 2017). This is due to how monocrops produce limited ecosystem and thus do not support a vast array of pests. This in turn, allows for certain pests to dominate, offsetting the balance of the ecosystem. Heavy chemical use is employed as a solution in attempting to control the pests that would otherwise control themselves in a diverse ecosystem. Various interventions such as GMO's, chemical crop protections, and biotechnologies are implemented to attempt the control nature. Portraying these technologies in a positive way, works to normalize ideals of the domination over nature.

In the film, Lynas argues that “using any kind of crop protection, whether it’s the pesticide or the pest resistant crop, puts a selective pressure in the environment for those pests to evolve resistance, but that doesn’t mean you shouldn’t try” to develop crop protection (*License to Farm*, 2016). Lynas is normalizing the idea behind pesticide resistance in crops as being part of evolution—as an inevitable outcome. Nagel states in the documentary that the public can rest assured that these technologies are only applied because they are needed and necessary for the viability of the plant (*License to Farm*, 2016). This also works to normalize the idea behind the use of these technologies as being the solution rather than the problem with industrial farming. Rather than discussing other viable and more sustainable agricultural practices such as those in agroecological farming, the campaign works to maintain the status quo and sustain the dominant ideology behind industrial farming in order to maintain power.

Over the past five decades, there has been a growing body of literature recognising how the control over nature can produce negative consequences. As early as 1962, Rachel Carson’s

tide-turning book *Silent Spring* showed the risks associated with pesticide use. Carson's work focuses on pesticide use, more specifically the use of Dichlorodiphenyltrichloroethane commonly known as DDT. Carson discusses claims of indiscriminate use of pesticides and their unintended consequences of bio accumulation. Carson argues that environmental problems in part were due to the use of synthetic pesticides (1962). Of course *Silent Spring* was met with opposition from the chemical companies, but it ultimately led to a nationwide ban on DDT. This case presents similarities with the License to Farm campaign. The chemical companies and representations of expertise were used to delegitimize Carson's claims (Walker, 2013). The case study of *Silent Spring*, is an early example of how representations of expertise have been used to legitimize dominant ideologies, as well as to downplay unintended consequences of perceiving nature as a controllable force.

Social License

The License to Farm campaign employs a social license approach to relay their message. This is observed through the website, the documentary, and the narratives. The narrative pattern found in this campaign heavily focuses on the need to "educate" the public. This works to legitimize dominant Canadian agricultural practices because it sets up the issue as one of knowledge discrepancy between scientific and non-expert knowledge; a discrepancy that the industry claims can be addressed through education. The social license approach aims to garner public support for a particular practice, in this case the practice of industrial farming, and the campaign situates the concerns around these farming practices as a lack of knowledge. Part of the approach the industry uses signals their adoption of the social license as they aim to garner public support by positioning themselves as educators. The effort to "educate" is intended to make the viewer question their ideas about farming and put more trust in industrial agriculture—

and even induce feelings of guilt for having questioned farmers' and their practices. Examples of this include Chapter 5 of the documentary entitled, *Credible Voices*, in which the focus is on getting farmers to go out and speak to the public to educate them on farming practices. The dominant message is that of helping the public learn about the safety and sustainability of industrial farming. There is continuous discussion of building trust in the documentary as well as on other platforms associated with the campaign (Figure 4.8, 4.9, 5.1, 5.2, 5.3, 9.3, 9.4, 9.7).

As Gunningham et al. (2004) argue, the social license is not a tangible entity but rather an approach implemented by governments and/or corporations to regain public approval. Though originally a notion associated with the mining industry, its pervasive nature continues to grow, and it is employed vigorously in this campaign. Furthermore, as Pedro et al. (2017) state, more often than not the notion of social license is employed to meet the minimum demands to continue established practices. Therefore, companies are in a balancing act to minimize reputational damage and operational delays, by avoiding too much public opposition (Pedro et al., 2017). Gunningham et al., (2004) note how corporations/industry associations can adapt the discourse to appease people's concerns, while still maintaining the same controversial practices. This is precisely what is taking place in the License to Farm campaign. By using representations of expertise to leverage scientific knowledge to delegitimize public concerns and then position these concerns as irrational, fearful, and without substantive knowledge, the campaign appeases the concerns in a specific way to maintain their practices. Indeed, social license is employed as a PR and risk management tactic to maintain the dominant ideology and power relations for its economic benefit.

Furthermore, by placing particular farmers as "credible voices" the campaign is seemingly addressing public concerns by getting those closest in social status to discuss farming,

it is a manipulation tactic and a power move. The farmers are specifically chosen because they all have strong ties in the industrial farming sector, which is evident in my findings that show how they are members of corporate boards within the industrial farming industry and associations such as SaskCanola. In fact, the entire tone of the campaign, starting with its title, *License to Farm*, sets up farmers as susceptible to mischaracterization because they are framed as prone to being seen through the lens of misinformation and irrational fear. This is particularly effective in the Canadian context, where farms are central to national mythology. Agriculture was the primary driver of settler colonialism in Canada (Adelman, 1994; Russell, 2012; Bruce, 2000), and agriculture – especially that for export – still forms a significant part of Canadian economy (Statistics Canada, 2017). In challenging farmers, it is implied by this campaign, the “concerned consumers” are also challenging Canada’s central national myth, while simultaneously undermining the country’s economy.

What I found in my analysis of this campaign is that though it presents itself as an educational tool, its educational value is only superficial. The documentary presents minor instances here and there that to the uncritical eye, pass as an educational documentary content. For example, speaker Blaine Chartrand, states of GMO’s “all we’re doing is the next level of plant breeding. We’re giving it a very specific trait by moving something across. It’s very precise. You’re taking out of an entire library a single couple of sentences and moving it into an organism” (*License to Farm*, 2016). This is one instance where there is an actual educational narrative happening. However, the majority of the documentary does not focus on the educational aspect but rather to frame the consumer as misinformed and irrational. Indeed, Rob Wallbridge’s blog post “What Story Does ‘License to Farm’ Tell?” presents a chart (Figure 11.1), which demonstrates the patterns that emerged in the narrative and allowed me to question

the documentary's 'educational' approach. For instance, words such as "sophisticated," "modern," "environmentalist," "credible," "proud" are all used by the speakers in the film to describe proponents of industrial farming practices (Wallbridge, 2016). While words like "confused," "bewildered," "fear," "anti-farm movement," "misinformed," "dumb," "myths," are all associated to consumers and their concerns (Wallbridge, 2016).

License To Farm's Words About...

Farms, Farming, and Food	Consumers and Consumer Attitudes
tradition	push-back
vast, complex enterprise	customers
cutting edge technology (3 times)	public fears
risky business	misinformation
“one of strictest in the world” [regulatory system]	far removed [from agriculture]
values	“conceptions stuck in 40s and 50s”
[farmers] produce safe food	confused, bewildered
[need for, reality of] choice	illegitimate fears
modern [practices]	disconnected
specific and necessary use of pesticides	“romanticized ideal”
revolutionary technology	anti-farm movement
sophisticated	not scientifically based (twice or more)
safe food (at least 12 times)	no basis in fact
environmentalist	concern (4 times or more)
most concerned about pesticides	“activists allege”
protect the environment	misunderstanding (at least 3 times)
sustainable (at least twice)	dumb
family-owned and operated	fear-mongering
efficient, efficiency	illogical (twice or more)
“doing best job we can”	counterproductive
healthy food (at least 5 times)	worried

innovation	beliefs (twice or more)
love [for farming] (at least twice)	perceptions (twice or more)
credible	myths (at least 4 times)
trusted (3 times or more)	fear (3 times or more)
improve the environment	suspicious
need to speak up (3 times or more)	naturalistic fallacy
need to tell their story (2 times or more)	misinformed
improving land	misconceptions
good stewardship	need education
proud	confused
	upset
	consumer concerns not scientific

Figure 11.1 Table from “What Story Does ‘License to Farm’ Tell?” by Rob Wallbridge.

Though the campaign is presented as an educational tool through a social license approach, I argue that it is a deceptive use that allows the campaign to appear like they are responsibly addressing industrial farming practices concern. The campaign is not really interested in educating the public but is rather interested in appearing like they are in order to secure their corporate interests. The social license approach allows them to present the campaign as such and helps to obscure the true agenda.

This use of social license is not new in this campaign. Even the early literature on social license as seen in Gunningham et al., discusses how corporations/governments/industry associations use a social license approach, and the language associated with the approach, as a risk management tool (2004). Corporations, governments and industry associations, etc., employ

a social license approach to manipulate the public into believing they are addressing their concerns, while still maintaining the same controversial practices.

Actor Network Theory

The use of Actor Network Theory, outlined earlier in the thesis, is a productive approach to unveiling how social license is employed in the License to Farm campaign. In the following section, I briefly review the four phases of translation—problematization, interestment, enrolment and mobilization—to reveal the workings of social license at play.

Problematization

Callon defined the problematization phase as the discovery of the problem or opportunity with which an actor proposes a solution. The problem identified in this campaign is the public pushback against industrial farming practices. The increasing interest and support among for small-scale, locally grown, organic crops over modern farming food sources poses a problem for the industrial farming sector. Therefore, once this is established as the problem, defining the proposed solution acts as the ‘obligatory passage point’ (Callon, 1986; Carroll et al., 2012). The proposed solution in this case is to employ a social license approach to educate the public in response to the identified problem. Indeed, the need to educate the public is mentioned 14 times in the documentary. For example, Cheryl Nagel repeatedly discusses the need for farmers to go out and share their stories as farmers to bring people to an understanding of what really happens out in the field (*License to Farm*, 2016). The first step in the translation is to identify a problem and to then identify its solution to try and rectify the situation. The industrial farming sector has been met with a growing resistance among consumers to embrace its practices as safe, environmentally friendly, sustainable, and responsible. If consumers completely turned away from supporting industrial farming there would be significant financial consequences for the

large biotech, chemical, and industrial farming corporations and wider industry. Indeed, organizations such as SaskCanola, Canadian Canola Growers Association, Canola Council of Canada, Ag-west Bio, Monsanto, Dupont, Dow, and Agrimetrix, which are all identified to be linked directly or indirectly to the campaign, would be affected. Therefore, it appears as though the employment of the social license approach to the License to Farm campaign is the proposed solution to protect this sector of Canadian agriculture. The development of the campaign, informs the next phase of translation, which is *interessement*.

Interessement

Callon describes the second phase as *interessement* through which other actors are attracted or pulled in to the proposed solution to favour a new opportunity that confirms the problematisation phase (Callon, 1986; Carroll et al., 2012). Now that the problem (consumer pushback) and proposed solution (social license approach to educate the public) is identified, the License to Farm campaign is created to address the pushback by employing the social license approach. Various actors (the speakers in the documentary) and actants (non-human actors like social media platforms, hashtag, website, titles, appearance) are brought in to promote an educational message on the safety of industrial farming while employing the proposed solution approach of social license. For example, the “screening in a box” kit is created, and then mobilized, for classrooms to enable teachers to screen the documentary. The kit includes a set of questions that are meant to bring students to an understanding of industrial farming (Figures 9.5 to 9.7). However, as shown in Figures 9.5 to 9.7, the questions are specifically worded to bring attention to the benefits of industrial farming, rather than focusing on negative implications of its practices. For example, in Figure 9.5 Chapter 2 question a., it asks: “If you grow GM crops (canola, corn, soybeans, or others), why do you choose to? What are the benefits to the farmer

and the consumer?” This question only prompts the student to discuss the benefits of GMO crops, while omitting any discussion on the risk or unintended consequences. The campaign is presented as a seemingly neutral and unbiased approach. However, what I observed in my findings is that it is really working to maintain a particular ideology on industrial farming practices as the best farming method. Yet, with the social license approach the campaign is able to mask their agenda of legitimizing industrial farming as the dominant farming method by presenting the campaign under an educational veil.

Enrolment

The third phase of enrolment is described as a negotiation process to exhibit how the interessement meets the actors’ interests and needs and persuades them to accept the new actor-network (Callon, 1986; Carroll et al., 2012). In the interessement phase the License to Farm campaign entered a negotiation with the chosen speakers to align their interests of continued support for industrial farming. In the enrolment phase, it is important to choose speakers whose backgrounds and values align with securing industrial farming as the dominant farming practice in Canada. For example, Dr. Joe, Schwarcz, Director of McGill University Office of Science & Society, shows ties with large biotech corporations when his office received funding from The Council for Biotechnology Information, whose members include Monsanto, Dow, Dupont etc (Figure 2.6, Figure 2.7). It is generally recognized that organizations will help fund institutions that align with their own values. In the License to Farm campaign, who is chosen to deliver the campaign’s message and how their backgrounds demonstrate similar vested interests towards favouring industrial farming practices is key in the enrolment process. The solution to the identified problem (applying a social license approach to the campaign) then allows the agenda

of securing the prevalent use of industrial farming practices to be masked under a seemingly educational tool.

Mobilization

The fourth phase encompasses the important process of ensuring that actors represent other actors' interests (Callon, 1986; Carroll et al., 2012). This means that the network of actors in interlocking alignments are all working together with one goal: to secure industrial farming's status as the dominant farming practice in Canada. This last phase encompasses a multitude of actors (human) and actants (non-human) to realize the network's goal. For instance, Figure 8.7, illustrates this campaign's network of allies being the documentary, the website, the social media platforms, and the hashtag #licensetofarm. In addition to these media objects, patterns in the narrative, such as framing industrial farming as a safe, sustainable, and 'smart' farming method, further works to secure industrial farming's status. For example, the hashtag #licensetofarm is found on all the campaigns social media accounts (Facebook, Twitter, Instagram), as well as on the website itself, to encourage viewers to join a conversation about the benefits of industrial farming. The use of the hashtag makes it much easier for the public to gain access to content from the License to Farm campaign since its use is prevalent by various actants (social media platforms, website). If someone were to conduct a simple Google search of the #licensetofarm, all the social media accounts show up, along with the website itself (Figure, 1.3 11.2). The hashtag does not only work on the social media sites, where it originated, but can also be found on other platforms, such as Google or the website www.licensetofarm.com. Additionally, the campaign's encouragement of the public to join the conversation allows them to grow their network even stronger by getting outside actors involved.

Summary of Observations

The four phases of translation illustrate how this campaign employs different actants and actors in an allied network with the goal of mobilizing and maintaining support for industrial farming practices to secure corporate interests. Each piece of the network, be it a media object like the #licensetofarm, or a speaker like Mark Lynas, all have a role in securing the network's goal. Moreover, employing ANT in my project allows for the often overlooked actants (non-human) entities to be given similar attention in the pursuit of the network's goal because they are created and employed by the human actors.

The creation of the network first begins with the perceived problem to which a solution is quickly sought out. Once the industrial farming pushback was identified, proponents of this farming method, quickly employed a social license approach in the creation of the License to Farm campaign to maintain their dominant status in Canadian agriculture. Every entity that makes up the campaign (documentary, website, social media, speakers, resources, hashtag) works as part of the social license to present a seemingly educational tool. However, the campaign actually uses representations of expertise to position itself as a legitimate and credible entity, whilst framing the consumer as uneducated, irrational, and anti-farm. This message is then mobilized through the various platforms the campaign network employs. Furthermore, the campaign then enrolls the consumer as part of the conversation to grow the network.

Constraints, Concerns, and Future Research

As a case study in social license approach, this study has some constraints related to case study design, social license literature, and the contemporary culture of science skepticism. Case studies allow for in-depth analyses and opportunities to use multiple methods on the same, relatively small, data set (Yin, 2006). This means that case studies can be rigorous exercises as

they allow the researcher to pay attention to a greater amount of detail in the data, and to generate observation through an iterative process. However, because this study involves a single case, the approach is constrained in that its findings cannot be generalized widely. While this study offers important insights into the development of the social license approach, the applicability of the findings beyond this particular case is limited at best, but a strong foundation from which to launch more studies that could include other samples of the social license approach.

As the social license approach is relatively new, the literature on social license remains scarce. The literature that does exist is often found in business and marketing publications, and to a lesser extent in policy studies. Because it is still a relatively new idea and has predominantly been associated with the mining industry, there is still no clear understanding of its application, nor a comprehensive treatment of it in communication or discourse studies.

Finally, the recent rise in populist politics and the so-called “fake news” has given rise to unprecedented science skepticism around the globe. This is so much so that even Bruno Latour himself has made efforts to distance himself from uncritical use of some of the fundamental STS ideas. In 2004 he questioned if STS scholars could bear some responsibility for populist science skepticism (Latour, 2004), and in 2017 he openly made it his mission to come to the defense of science (de Vrieze, 2017). Whereas these developments do not negate the value that STS tenets provide for critical analysis, they are reminders that a mixed method may help to mitigate such concerns to ensure the key aspects of my study can be understood within a more complex framework. My findings point to wider issues that further studies could explore to extend my single case study and broaden the critique of the social license approach. To challenge the unquestionable authority of science, and the use of mere representation expertise is still an

important exercise in critical thinking, but not one that suggests that “anything goes” when it comes to knowledge.

To address some of the challenges that come with using a single case study⁴, I suggest that future research would include several potential areas. One would be to follow the License to Farm campaign along to observe if and how it grows and if public pushback reduces or continues to persist. Another, perhaps more critical area, would be to explore other campaigns that employ social license to consider if and how they may differ when motivated by commercial interests, as opposed to – at least nominally – public interests such as public health or environmental campaigns. Lastly, historical analysis that compares earlier public relations practices, such as corporate social responsibility, to the contemporary social license practices could greatly contribute to the fields of communication and discourse studies.

Conclusion

My project provided a deeper look at the vested interests that sometimes lurk beneath the surface of communication materials. It demonstrates the importance to apply a critical lens to campaigns such as this, which appear on the surface to be public education campaigns but can hide vested political and economic interests behind the use of representations of value-neutral evidence-based advice. Though scientific knowledge and evidence is indeed very valuable, it is important to ensure that it is presented not to leverage control and maintain dominant interests like in the License to Farm campaign. Without challenging scientific discourses as cultural forms that encompass vested interests, the dominant ideologies and power relations will continue to be reproduced and maintained. The significance of my project is that it demonstrates how STS

⁴ A single case study is appropriate to the required scale of a master’s level thesis project.

related issues are not isolated to science and technology but are also permeating the commercial world.

Additionally, this campaign works harder to portray a specific picture of the concerned consumer than it does to educate the public. Those who are credited as having authoritative and credible voices in the campaign, stand in contrast to the concerned consumers, who are presented as irrational voices. Throughout the documentary the message is principally from the perspective of proponents of industrial farming. However, at two separate points in the film, two women, Janice Rushdy and Sharon Heading, are brought in and presented as “concerned consumer.” What is noteworthy in these two instances is how they are presented. Firstly, they are both in, presumably, a grocery store parking lot in the middle of the day, judging by the amount of daylight present. This suggests to the viewer that these women are likely homemakers whose sole duty is to take care of the home. The implication then is that they are not expected to have much scientific knowledge on the agricultural debate and are likely among those consumers who get information from the popular search platforms (Google, YouTube) shown earlier in the film (Figures 1.1, 1.2 and 1.3). Additionally, their title is only presented as a “concerned consumer,” and they are both women. This plays on the stereotype that women are more emotional than men and on matters of science should be taken less seriously. Finally, the fact that their title is just “concerned consumer” leaves the viewer not knowing what kind of education, experience, or knowledge they might possess, leaving the viewer to think they are not credible sources of information. Every other speaker in the documentary is given some credentials as to what their career is except Janice Rushdy and Sharon Heading, who are the only two opposing the dominant view presented in the film. The language use plays a significant role in persuading the

public to support industrial farming but also to see consumers as utterly incapable of educating themselves and should not be trusted.

As a way to help gain support for industrial farming, the documentary works hard to portray industrial farming as still family owned, which may be the case, but it also urges the viewer to see it as smaller family business than it actually is. The reality is that industrial farming involves predominantly large-scale operations that involve many individuals and companies and that this corporate farming accounts for the majority of food production in Canada (Statistics Canada, 2016). Yet, we are invited to view farming as simple and family-managed food production. Moreover, though the campaign discusses “farming” as a whole, no other farming method is truly addressed, and when another is mentioned by the speakers, such as organic, it is only discussed in discouraging terms.

As Michel Callon discussed and STS proponents at large agree, model 3 being the public engagement model, is what will offer the most meaningful relationship between those involved in the science and technology industry and the general public. However, there is still a dominant acceptance of model 1 (public education model). This in turns makes it easier for controversies such as the one in the License to Farm campaign to exploit scientific knowledge to support their corporate interests.

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Appendix

Figure 5.0: Top 50 Tweets on @Licensetofarm account

Figure 5.1: Top 50 Tweets on @Licensetofarm account

Front Step Farms,Inc @FrontstepFarms · Jan 14

That word Nature. Confused? Don't be, if there weren't profitability producing food beyond pesticides [#Monsanto](#) wouldn't try. Prefixes "Bio" "AG, put a fancy leaf on it now you have a trademark. Conflicted? [#realdirt](#) [#licensetofarm](#) [#factsnotfear](#) says marketing is fear mongering?

Monsanto BioAg CA @MonsantoBioAgCA

It was amazing to work by your side in 2017. We can't wait for more great results in 2018! [#happy2018](#)

1 5 1

Front Step Farms,Inc @FrontstepFarms · Jan 14

[#licensetofarm](#) [#foodevolution](#) Here are our suggestions to those [#pawnfarmers](#) who continue to sit around Farm Board Orgs deflecting for [#Monsanto](#), singing the benefits of [#modernag](#), moving it into the class room [#AGeducation](#) but forgetting to tell [#realdirt](#) [#StopAGscripting](#) [#gmo](#) [twitter.com/bogga1967/stat...](#)

This Tweet is unavailable.

1

Front Step Farms,Inc @FrontstepFarms · Jan 14

[#licensetofarm](#) [#AgEducation](#) [#realdirt](#) [#factsnotfear](#) Are you tired of being a [#pawnfarmers](#) subscribing to the scripts put out by paid positions in farm organizations about the benefits of [#modernag](#) technologies? [twitter.com/bogga1967/stat...](#)

This Tweet is unavailable.

Figure 5.2: Top 50 Tweets on @Licensetofarm account

Figure 5.3: Top 50 Tweets on @Licensetofarm account

Figure 5.4: Top 50 Tweets on @Licensetofarm account

License to Farm @licensetofarm · 6 Nov 2017

#LicenseToFarm Extended Interviews are a great resource for ag education with friends, family or students. licensetofarm.com/resources/

0 1 2

Jodi Koberinski @JodiKoberinski · 8 Dec 2017

First it was the atrocious #LicenseToFarm film. Then the Bernaysian escapade @foodevomovie. And now- "Science Moms" farmruralag.com/the-shark-farm... look. When a "scientist" gets billed as a "star" is it a documentary or a propaganda film?

The Shark Farmer Podcast – Layla Katirae PhD C...

Layla Katirae PhD is one of the stars of the documentary "Science Moms" We talk about GMO's and Chicken Pox parties. Please visit our advertisers The ... farmruralag.com

8 1 1

Figure 5.5: Top 50 Tweets on @Licensetofarm account

Figure 5.6: Top 50 Tweets on @Licensetofarm account

Figure 5.7: Top 50 Tweets on @Licensetofarm account

Figure 5.8: Top 50 Tweets on @Licensetofarm account

Figure 5.9: Top 50 Tweets on @Licensetofarm account

Figure 6.0: Top 50 Tweets on @Licensetofarm account

Figure 6.1: Top 50 Tweets on @Licensetofarm account

Figure 6.2: Top 50 Tweets on @Licensetofarm account

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Figure 6.8: Top 50 Tweets on @Licensetofarm account

Figure 6.9: Top 50 Tweets on @Licensetofarm account

Figure 7.0: Top 50 Tweets on @Licensetofarm account

Figure 7.1: Top 50 Tweets on @Licensetofarm account

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Figure 7.8: Top 50 Tweets on @Licensetofarm account

Figure 7.9: Top 50 Tweets on @Licensetofarm account

Figure 8.0: Top 50 Tweets on @Licensetofarm account

Figure 8.1: Top 50 Tweets on @Licensetofarm account

Figure 8.2: Top 50 Tweets on @Licensetofarm account