THE PROFUSION OF POTATOES IN PRE-COLONIAL BRITISH COLUMBIA

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ABSTRACT

In 1858, the explorer, trader, and Indian agent, William Eddy Banfield published an article for Vancouver Island's first newspaper, the Victoria Gazette, describing the trade and cultivation of potatoes among the First Nations of Vancouver Island's West Coast. Banfield described a great feast among the Tla-o-qui-aht people that centred on the consumption of the prestigious trade good, potatoes. This highly ritualized, culturally and socially significant practice of the potato feast raises many questions about the early European perception of dynamism among First Nations people. By tracing the early diffusion of the potato during this time period, I use the potato as a medium to examine shifting perceptions regarding European perceptions of Pacific Northwest First Nation's land use.

INTRODUCTION

In 1858, the explorer, trader, and Indian agent, William Eddy Banfield published an article for Vancouver Island's first newspaper, the Victoria Gazette, describing the trade and cultivation of potatoes among the First Nations of Vancouver Island's West

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Coast. Banfield described a great feast among the Tla-o-qui-aht people that centred on the consumption of the prestigious trade good, potatoes (Sept. 9, 1858).

This highly ritualized, culturally and socially significant practice of the potato feast raises many questions about the early European perception of dynamism among First Nations people. How did this non-traditional foodstuff so readily become a significant part of the indigenous diet? The First Nations' relationship to the potato was furthered by interactions with Europeans who came to the Pacific Northwest. Over time, as European traders were replaced by gold miners, settlers and colonists, the motivations behind these interactions changed. Using documented descriptions of the potato as a medium for analysis, I will track shifting European perceptions of the First Nations people and their agricultural practices. Specifically, I will focus on the shift in settler policies that coincided with the shift from pre-colonial to colonial agendas, when land use became an issue.

This essay is an analysis of early European firsthand accounts relating to indigenous potato cultivation and more generally, indigenous agriculture along the Northwest coast. Examining these primary documents, specifically their descriptions of aboriginal potato cultivation, will reveal shifting biases and prejudices that became heightened as Europeans grew increasingly comfortable in this new frontier. This paper focuses primarily on an area along the coast of what is now British Columbia, although some mention of the Makah First Nation of Washington's Cape Flattery and the Tlingit of Southern Alaska will be made.

Before I begin, a case must be made for the uniqueness of the potato's diffusion into the Pacific Northwest. The potato was first seen by Europeans in 1532 when the Spanish explorer Pizarro and his men encountered the Andean people, who lived in present day Peru and Chile, subsisting upon them (O'Riordan 2001: 27). From here, the potato experienced a very slow and highly contested introduction into Europe. At times it was lauded as an aphrodisiac, the apple of the earth. It was later denounced as the source of alcoholism, typhus, leprosy, and other skin dis-

eases that resembled its bumpy skin. In France, the potato was banned in two separate cases, in 1619 and 1748, in an attempt to stop the spread of disease (Brandes 1999: 87). Widespread famine in Russia during the 1760's persuaded Catherine the Great to order potato planting among the serfs, but it was not until the 1850's that potatoes became a widely grown crop within Russia, following the enforcement of Catherine's order by Czar Nicholas I (Viola and Margolis 1991). By the late 1700s, with increasingly prevalent continental wars, it became recognized as a valuable food source because it could be kept in the ground until it was needed for a meal. Marauding soldiers in search of food missed the buried potatoes, taking instead the harvested grain. The potato became an important food source in difficult times and became a contributing factor for population increases throughout Europe. The population increases, which occurred during the Agricultural Revolution, provided excess workers that would later fuel the Industrial Revolution.

The potato's introduction to Europe was slow, taking nearly two hundred years to become an important staple. By the time Captain James Cook charted the Pacific Northwest in 1778 it was commonly cultivated in many parts of Europe. In comparison, I will show that the First Nations of the Pacific Northwest accepted the potato far more quickly than their European counterparts, harvesting and trading their potato crops in great numbers by around 1825 – a mere forty- seven years after first contact (Scouler 1905).

OUTLINE

Beginning in 1828, this paper will trace the contested introduction of the potato at the Hudson Bay Company's Fort Langley, located along the Fraser River (Suttles 1951 and 2005). This will be followed by a discussion regarding the possible genetic origins of the various potato varieties that have come to be naturalized in the Pacific Northwest as well as an examination regarding the way in which this information challenges or supports the story (Zhang et al. 2010). I will then examine Fort Victoria's establishment in 1842. Here, James Douglas' knowledge of the productive and contemporary Songhees' potato plots in the area informed his decision to choose this area for the establishment of a fort. This decision illustrates how important the cultivation of potatoes had become in the eyes of the European traders, warranting an investigation into the possible mechanisms of dispersal from its supposed initial introduction only fourteen years prior. At this point in my analysis, an inquiry into the theory of the Diffusion of Innovations will be undertaken (Rogers 1995). This theoretical framework is useful for my study since it provides a model for how newly introduced objects or ideas move across a landscape. After this, I will return to Banfield's writings in greater detail as a way to provide further support for the 'diffusionist' model. Banfield's writings represent a European attitude and consciousness that is very different from the 1864 writings of Robert Brown. Brown's writings indicate that there was a shift in attitude and policy regarding land allocation for First Nation's communities. The physical manifest of this disturbing change in European policy is highlighted by the damaging reallocation reserve land policies of Joseph Trutch, initiated in 1865. These policies made it nearly impossible for First Nations to practice agriculture and marked the end of the profusion of the potatoes among First Nations in British Columbia.

1827 - FORT LANGLEY

It has generally been accepted that potatoes were first introduced onto the coast of British Columbia a year after the establishment of Fort Langley (Suttles 1951). According to James McMillan, writing as a factor in the Fort Langley Journal, the schooner Cadboro brought potatoes to Fort Langley (situated along the Fraser River) in 1828, as well as other supplies from Monterrey (what was then Mexico). Weeks before the schooner's arrival, the journal tells of the men at the fort preparing the ground in anticipation of its approach (McMillan 1998 (1828): 56-57). Later in the year, the traders harvested a hearty crop of potatoes. By the spring of 1829, the men at the fort were paying their indigenous employees with excess potatoes. By this time, the natives had apparently acquired a taste for the tubers. This has been argued to be the first documented cultivation of potatoes on the Northwest coast, and it is interesting to note how quickly the First Nations developed a demand for this product. Prior to the cultivation of potatoes, there were several comments made in the Fort Langley Journal about a lack of First Nation's demand for any items that the fort had to offer as payment for labour, furs, salmon and sturgeon. After this successful harvest there are several mentions of the potato as a valued trade item for First Nations communities.

As early as January after the fort's first harvest in 1829, Archibald McDonald, the new factor, records the following: "An unusual Squad of Men, women & children Strolled thro' the field to day in search of potatoes & also we have no doubt with the view of accommodating our people– they have turned off more peremptory than usual" (McDonald 1998 (1828): 92). This quote indicates how secure the fort was with the addition of a new food source. It also shows that the First Nations people had a clear idea regarding how to harvest the potato and found it desirable enough for them to harvest and eat.

In May of the same year, several employed First Nations were "paid with large Kettles full of potatoes now that we find of this very essential article we have more than we Can make use {now it's become impossible to preserve them}" (McMillan 1998 (1828):112). The potatoes that the traders used as a trade good were the past years' stored potatoes, something that the fort was obviously having difficulty keeping any longer. Is this evidence of traders providing First Nations with the first seed potatoes that would become the root of all future indigenous potato crops along the coast? Wayne Suttles (1951) uses the evidence from this same journal to argue that this was the initial introduction of potatoes to the Coast Salish. Suttles addresses many of the questions that are pertinent to the investigation of potato cultivation on the Northwest coast. He raises questions about how the potato was so easily dispersed and suggests that this rapid dispersal may have been related to the use of previous agricultural knowledge (Suttles 1951: 272). Suttles argues that the new crop was easily and quickly incorporated, or diffused, into a system of traditional tuber agriculture that was already in place along the coast. He suggests that potatoes were adopted using a system that the First Nations already used for the cultivation of camas, wapato and tiger lily – all starchy bulbs that are cultivated in a similar manner to the potato.

The seeming lack of evidence for agricultural practice among Northwest coast First Nations groups along with the presence of general systems of social hierarchy and semi-sedentism has long presented the discipline with "the puzzling case of the noncultivating Northwest Coast" (Deur & Turner 2005: 5). The last fifty years has seen the rise of ethnobotany and the recognition of different non-Western methods of cultivating and maintaining the land. Along with this, there has been an increased awareness regarding First Nations land and plant use, including a recognition of practices such as controlled brush burning, maintenance of clam gardens and the cultivation of camas fields (Deur & Turner 2005).

Suttles' paper, as discussed here, is a landmark in opening up discussion regarding the potato and its relatively quick dispersal around the Pacific Northwest. However, his work is focused on the Coast and Strait Salish who represent only a fraction of the First Nations groups who were affected by this tuber. Recent genetic work (Zhang et al. 2010) and further historical inquiry (McDonald 2005) has revealed that these potatoes were not the first to be harvested along the coast.

McDonald's recent work on Tsimshian horticulture reveals that there was a developed potato trade already established along the Nass River before the Hudson Bay Company's fort was set up in 1834. During the first few years at Fort Nass (later renamed Fort Simpson), the European traders subsisted on potatoes traded from the Tsimshian, Nisga'a and Haida (McDonald 2005: 252-253). The manner in which these nations gained access to the potato is disputed, although some evidence suggests that it may have been introduced following the establishment of diplomatic relations between the Russians and Spanish in California. In 1806, the Russian American Company in Alaska was low on food provisions which meant that many people in the area were succumbing to the ravages of scurvy. The potato, a source of Vitamin C, is an antiscorbutic and the extent of scurvy during this period indicates an absence of potatoes. Russian ambassador, Nikolai Rezanov led an expedition to the Columbia region to procure food, but his crew, ill and weakened with scurvy, was unable to put a boat ashore. He proceeded instead to San Francisco where he negotiated with the Spanish for provisions. This trip opened doors between the Spanish and Russians, which led to the Russians establishing Fort Ross in Northern California in 1812. This was a depot with the two-fold purpose of growing provisions for Russian forts and providing an expanded supply of sea otter pelts (Chevigny 1965). Suttles also discusses a possible Russian diffusion, but he dismisses this in favour of the previously discussed diffusion from Fort Langley instead. However, in light of this early evidence regarding Tsimshian potato agriculture, it is not likely that they could have gotten them from the Salish people around Fort Langley since it had only been six years since the potato was thought to have been introduced at that location.

A physician and naturalist named Dr. John Scouler provides an early and informative account of the Haida trade and cultivation of potatoes on the Queen Charlotte Islands. This account was recorded in his journals aboard the Hudson Bay company trade vessel the William & Ann. On July 26th 1824, he writes:

"The acuteness of the Queen Charlotte's Islanders has prompted them to adopt a great many customs of civilised life, & the cultivation of potatoes is very general among them, and had our time permitted we might have obtained any quantity of this useful article. This consideration alone, in my opinion, places them far abovethe natives of the Columbia in the scale of intelligence. With all the advantages of having Europeans constantly among them I do not know of one improvement requiring the smallest exertion that has been adopted by the Cheenooks. Poor Skittigass Tom was the only Indian that ever expressed much anxiety to learn to read and write, & was very fond of obtaining a few ciphers. He made charts of Nass & Skittigass, which served to give a very good idea of the coast & of the different tribes settled along it." (1905 (1824):191)

Notice how even early on in the pre-colonial period, there is a language of superiority and usage of agricultural knowledge as indicative of the 'civilized' (Mackie 1993: 108-109). As well, Scouler gives the Haida credit for their efforts in learning how to read, write and map – all very Western based knowledge systems.

Later in 1848, Scouler continues to praise the 'progressive' nature of the Haida. "The introduction and general cultivation of the potato without the aid of European lessons or example is a remarkable instance of the docility and industry of the Haidah, and they not un-frequently sell from five to eight hundred bushels of them at the annual fair at Naas." (Scouler 1848: 247). This quote indicates the friendly nature of the trade and reveals Scouler's characterization of the Haida as a 'progressive' people who could easily adapt to European ways. Despite these friendly overtones, his general tone remains patronizing and condescending because he still expects the natives to naturally progress towards the European goal of 'civilizing' the area. As well, in the quote above, he denies that the Chinook have an ability to adapt.

Scouler's writings did not appraise the land as much as later writers were apt to. His writings seem to be 'scientifically' descriptive – the product of a naturalist. The people he describes, like the plants and animals, are not depicted as frozen in time like they are in the writings of later ethnographers. He creates a First Nation "other", who is different in many ways from the European known, but he allows his characters to have enough agency "to learn to read and write" and to be active and even helpful members of the expeditions that he describes. Scouler's characterization of the First Nations he encounters is fluid and subjective, and is not bounded by harsher prejudices that are often characteristic of the colonial mindset.

GENETICS

Along the Northwest coast there are several naturalized varieties of potato that are supposedly derived from crops that were introduced by Europeans during the early years of contact. In 2010, an American genetic study tested the diversity of these varieties to see how closely related they are to the potatoes that were taken to Europe in the initial old world dispersal during the 1530s, or to the original potato varieties seen in the Andes (Zhang et al. 2010). This is an intriguing question because it has been generally accepted that after the dispersion of potatoes out of the Andes from Chile to Europe, all other potato introductions were comprised of this European naturalized variety. The study shows that three of the potato varieties grown along the coast were not directly related to the European variety, but more closely related to the Peruvian cultivar or a cultivar naturalized to Mexico (Zhang et al. 2010: 22). This information indicates that these varieties were either brought directly from Peru, or were brought to Mexico from Peru, and were dispersed into the Pacific Northwest from there. Either way, this offers an intriguing new dispersion pathway that demonstrates how inter-related early European trade networks were, since trade with Mexico and Peru was still important to the distant traders in the Pacific Northwest. Peru and Mexico are located along the sailing route from Europe, which took travellers around the Cape Horn of South America. As well, there is documented trade between

Europeans and forts that were set up in Mexico. Another possibility is that the potato was a trade good derived from indigenous trade networks that reached into southern North America, or even as far as South America. Although these studies provide some preliminary information, more research is needed to completely understand the origin and dispersion of the potato.

An intriguing aspect of the introduction of the potato is that there is an additional variety found on the Northwest coast that is not from these Peruvian or Mexican cultivars. Rather, it is more closely related to the Chilean cultivars that were naturalized in Europe. This variety must have been part of a separate European dispersal (Zhang et al. 2010: 22). This potato, the 'To-Le-Ak" of the Quillayute Nation of La Push Washington State, shares a similar cultural history with potato varieties deriving from the early pre-colonial fur trade era. Why would the European fur traders introduce two different varieties of potatoes separately? To answer this we need to look at specific potato varieties.

The three potato varieties derived from Mexican or Chilean cultivars are the Ozette potato of the Makah in Washington State, Maria's potato of the Tlingit Nation and the Kasaan potato of the Haida, both from Southern Alaska. The Ozette potato was reportedly introduced by the early Spanish explorers who set up a fort in Neah Bay for a short time in 1792, an area where several of the Makah's villages are located (Zhang et al. 2010:25). As well, the Spanish traders set up a garden at their settlement in Nootka Sound on Vancouver Island in 1790, only a short distance away from Neah Bay. Potatoes are listed in the journal of José Mariano Moziño as one of the crops grown here (Moziño 1970:111 and Zhang et al 2010:25). As well, in 1791, the Spanish trader Juan Pantoja y Arriaga describes a visit to the gardens at Nootka Sound where "some fine cabbage, lettuce, radishes, potatoes, garlic, onions, carrots, artichokes and tomatoes have been grown" (Gill 1983: 351 and Wagner 1933:162). The people of Nootka Sound are part of the same language group and share many cultural affiliations with the Makah, suggesting

an increased level of trade and shared cultural practices. If it was not diffused through trade with the Spanish, the potato, valued by the Makah and Nootka groups, would have diffused between these groups through the process of natural trade relations. The other two potatoes, the Kasaan and Maria's potato, may have been traded up the coast to Alaska, or may have been introduced by European traders. It seems then, that these potato varieties are the same ones that Scouler (1905) and McDonald (2005) describe as a valuable trade good along the Nass River. The Quillayute Nation of La Push, although geographically close to the Makah, keeps very distinct cultural boundaries, maintaining separate languages and similar but separate origin stories. This is different from the connections between the people of Nootka Sound and the Makah, as mentioned above. It is possible that this cultural boundary controlled the flow of potato varieties amongst these people or maybe their lack of connection with the Spanish traders gave them a predilection for the variety introduced by different traders.

In either case, the appearance of potatoes in the Pacific Northwest, although vital to our understanding of the issue, is difficult to trace and understand with confidence. That is why the remainder of this essay will concentrate on the diffusion or movement of the potato across the landscape – examining why this tuber was so successful amongst the First Nations people. As well, the remainder of this paper will continue to review and analyze the European's perception of the First Nation's practice of cultivating potatoes.

Fort Victoria 1842

Unlike the complex history presented here, some believe that the introduction of the potato into the Pacific Northwest follows a more easily examined trajectory. James Douglas of the Hudson Bay Company (HBC) proclaims in a letter to London in October 1839, the following:

"I may be permitted to mention . . . as a matter to interest the friends of our native population, and all who desire to trace the first dawn and early progress of civilization, that the Cowegians (Lower Fraser Tribes) around Fort Langley, influenced by the counsel and example of the fort, are beginning to cultivate the soil, many of them having with great perseverance and industry cleared patches of forest land of sufficient extent to plant, each ten bushels of potatoes; the same spirit of enterprise extends, though less generally, to the Gulf of Georgia and de Fuca's straits, where the very novel sight of flourishing fields of potatoes satisfies the missionary visitors that the Honourable Company neither oppose, nor feel indifferent to, the march of improvement?" (quoted in Suttles 1951:274)

Suttles argues that this claim was a political attempt to counter the negative image that the HBC had acquired as a business that sought to keep First Nation's in a static, 'non progressive' state in an attempt to more easily control their trade (1951:4). Perhaps, considering these political intentions, the credibility of this quote is somewhat undermined since it may simply be an example of Douglas attempting to portray the HBC in a favourable light. However, this quote does illustrate how widespread the potato was amongst the First Nations and it illustrates the HBC's awareness of indigenous agricultural practices. As well, this quote indicates that the First Nation's emphasis on agricultural practice was deemed 'industrious' and represented an improvement on previous practices in the eyes of European authorities. Cultivation here is seen as a landmark achievement in the 'civilizing' of the First Nations, a concept that is similar to the ideas that are inherent in Scouler's writings fifteen years prior.

Three years later, now acting as chief factor, James Douglas was charged with deciding where to establish the next company's fort above the newly contested American border. He decided to place this new fort on the southern tip of Vancouver Island. This decision was based upon observations of intense indigenous land use in the area. He describes the potential for agricultural productiveness at what would soon be known as Fort Victoria. In a letter to John McLoughlin, he specifically notes that, "we are certain that potatoes thrive here and grow to a large size, as the Indians have many small fields in cultivation, which appear to repay the labour bestowed upon them." (quoted in 1943[1842]:6) This quote not only illustrates how important potatoes were to the First Nations, but it also indicates that the indigenous ability to cultivate potatoes was important to the fort since they would be able to provide the fort with food. It also ensured that the soil would be productive for the fort's own use.

Mackie (1993) discusses a similar valuation of the aboriginal produced potatoes in a letter from John Mcloughlin to another HBC trader John Work in 1844 stressing that,

"I hope every means will be used to increase our intercourse with the Indians of the Queen Charlotte Island, and it will be proper to purchase potatoes and whatever property they may bring to induce them to visit the Establishments more frequently, as we will be eventually the gainer by such a course. The potatoes cost a trifle, and provided they are not required at Fort Simpson. . . they may be sent to Stikeen." (Mackie 1993: 381)

At Fort Stikine, there were no gardens and the potatoes consumed were all derived from trade with the Haida (Mackie 1993: 381). The above quote indicates that HBC traders were promoting trade in potatoes for their own subsistence and to improve relations with the First Nations. This trading relationship gave the aboriginal population a degree of agency in deciding their price. Gill (1983: 351), Mackie (1993: 380) and Suttles (1951: 280) discuss how the potato may have been a good crop to cultivate and trade since it was always in demand at the fort. It may have been a trade that resulted from both an introduced cultivar and a strong market demand.

The 1840s were the beginning of a great profusion of potatoes. In Puget Sound, an American explorer wrote that the locals "cultivate potatoes principally, which are extremely fine and raised in great abundance, and now constitute a large portion of their food." (Farnham 1979 (1843): 104). In 1849, the first settlers arrived on Vancouver Island. Douglas describes these newcomers and their interactions with the indigenous people:

"This little body of Colonists, the first independent settlers on Vancouver Island, have commenced their bold enterprise, under the most favourable auspices: they have no enemies to dread, and no obstacles to encounter, beyond those which the hand of nature has interposed through the force of a teeming sail. Instead of thirsting for their blood, the Natives are not only kind and friendly, but willing to share their labours and assist in all of their toils, and they regularly bring in large quantities of the finist [sic] salmon and potatoes, which they part with at a low rate in barter for such articles as suit their fancy or necessities." (Fort Victoria Letters 1979 (1846-1851): 38-39)

This quote implies that there was a relationship of equality between the new settlers and the First Nations. In this case, potato and salmon represented a token of the First Nation's amiability. In this quote by Douglas, the potato encodes a metaphor of civility and peacefulness. In this way the potato may serve as a marker for the changing image of the indigenous people in the eyes of these Europeans. They perceived indigenous agricultural practice as a sign of aboriginal domestication and indoctrination into acceptable European customs and practices.

The late 1840s mark the end of the pre-colonial era when the period of intense fur trading had begun to wane. In 1849, Vancouver Island became a colony. After this event, the profusion of potatoes slowly became a threat to the newly developing European prerogative of taking native land for themselves. This spurred a reimagining of what Europeans deemed 'proper' use of the land, so as to lend legitimacy to their appropriation of First Nation's land.

THE DIFFUSION OF INNOVATIONS

The Diffusion of Innovations is a theory developed by Everret M. Rogers (1995), which seeks to explain the adoption and movement of innovations throughout a group of people or populations that are separated by culture type, language or some other ethnic dividers. This theory is applied to the topic of potatoes in the Pacific Northwest by Suttles (1951:281). This is an attempt to explain why the potato caught on so easily and quickly from his argued site of introduction at Fort Langley. If one can assume that the potato at Fort Langley, though perhaps a second or third introduction, was not the sole or the initial introduction of the potato to the Pacific Northwest, one can still recognize the helpfulness of this model for explaining its movement and adaption.

The 'Diffusion of Innovations' theory states that there are four main elements which control success: innovation, communication networks, time and preexisting social systems. An innovation is a new idea or technology that must be newly adopted or perceived as new by the adopter. Innovations are learned and moved through communication networks with a combination of trade interactions, exhibitions, word of mouth, and advertisements. Time and preexisting social systems control when and how fast the innovation is accepted. Aside from these four main elements there are important factors that control whether innovations will adapt in certain situations and contexts.

The innovation must have some perceived advantage in order to be adopted (Rogers 1995:15). For the potato the advantages are numerous in a gastronomic sense. As well, this innovation brings about economic benefits. For example the Haida may have been partly attracted to cultivating and trading potatoes to secure trading status at the HBC forts (Gill 1983; Mackie 1993; Suttles 1951). There are also some intangible advantages or disadvantages that could control the distribution of potato crops, like perceptions regarding taste and various health benefits. As well, the innovation must be compatible with current social norms and cultural practices in order for it to be readily accepted (Rogers 1995:15). Suttles (1951: 281) clearly shows how the practice of cultivating potatoes would have been easily adopted into the traditional tuber crop cultivation of the Salish. The Salish land ownership system, designed for growing and maintaining camas fields, provided an easily adaptable system for the potato because it could be grown in a very similar way (Suttles 1951: 276). Also, the highly developed camas trade was still underway in the 1850s (Banfield August 14, 1858). This would have meant that developed trade networks for food items were already in place.

Another important factor in the success of an innovation is its complexity (Rogers 1995:16). The potato might be considered incredibly complex or very simple, depending on the preexisting agricultural knowledge of people utilizing the crop. In a later article, Suttles (2005: 181) examines whether or not the agricultural practice of cultivating camas, wapato and other indigenous tubers may have preceded the introduction of the potato, or whether these practices developed at a later time. This may be the wrong question to ask because, as Suttles (2005) proves in this article, there is no evidence that the potato's introduction facilitated the growth of the production of other tubers. Regardless, the article still documents important indigenous concepts of plants, seeds and growing, characteristics that could help us understand whether or not the potato should be considered a complicated innovation within this context. Suttles (2005:191) talks about how the word 'seed' was unknown, and yet First Nation's groups recognized that tubers produced the plant. Perhaps in this case 'complexity' is too bound up in Western notions of difficulty and scientific, factual knowledge that does not translate directly to matters of indigenous traditional knowledge.

'Trialability' is also an important factor in adopting a new practice which is also tied to complexity. Rogers (1995:16) describes trialability as the ability of an innovation to be tested with a method of trial and error, rather than a process of being taught how to use an innovation. The potato was not automatically a staple for the First Nation communities that adopted it since they already had their own traditional staples. These other staples may have given the First Nation cultivators the luxury to be able to experiment with the potato alongside more traditional crops, like camas. Even after the potato became a central food item for many communities along the coast, a strong reliance on more traditional foods remained.

The final aspect of the diffusion process is 'observability' (Rogers 1995:16). This condition states that for a new practice or innovation to be taken up by other people in a community, it must be visible and observable. Along with this increased visibility, there would be increased access to knowledge relating to a particular item or practice. In the case of the potato, this knowledge would include information about when it is harvested, who trades it, who eats it, and how it is cooked.

WILLIAM EDDY BANFIELD- 1858

William Eddy Banfield, a ship's carpenter, originally came to Victoria in 1849. He actively traded and lived with the First Nations people of the West Coast of Vancouver Island between 1854 and 1858. He later took up the colonial post of Indian Agent in Ohiat in 1859 (letter from W. E. Banfield and Peter Francis Banfield to James Douglas Esq., July 17, 1855 & letter from Douglas to Rear-Admiral Baynes, October 31, 1859). He lived among the Clayoquat (Tla-o-qui-aht), observing and participating in daily activities and learning the language of the Nuu-chah-nulth tribes. His ethnographic writings are perhaps the only detailed firsthand account of the First Nations people of Vancouver Island's West Coast that was written by someone familiar with the language and culture prior to extensive contact with Europeans. Banfield's writings describe how potatoes were made visible to members of the community through the prestigious practice of feasting. In his writings of the Tla-o-qui-aht people, Banfield gives a detailed account of the potato's role in feasting events. Banfield writes,

"Immense quantities of potatoes are purchased every year by this tribe [Tla-o-qui-aht], from white traders and the Macaws [Makahs]. They make large feasts. I have seen seventy bushels of potatoes cooked at once, in two piles on hot stones. They eat whale oil in quantities with potatoes. At these feasts, probably two or three hundred guests are invited. The females are never asked. Much decorum prevails, and positive urbanity is shown to every guest, rich or poor. Clean mats are laid completely around the lodge; every guest as he enters is announced by name, and placed in his proper seat, and there are a number of the junior branches of the host's relations in attendance with small bunches of a sort of flax made from cedar bark, which is handed to each guest as he takes his seat, for the purpose of wiping his feet. The meal is never served until all invited guests arrive. Some chiefs are very late in coming. When all are seated, the host, who is near the cooking apparatus, takes a potato and eats it, and then gives direction to serve his guests. Few words are spoken during the feast-silence being a mark of strict politeness. As each finishes, a clean piece of flax is given him to wipe his mouth and hands, in the same manner as a napkin is used among whites." (Banfield Set. 9, 1858)

This passage shows not only how the potatoes were consumed and cooked, but it also shows that the potatoes were valued by the Tla-o-qui-aht people of the West Coast of Vancouver Island. These people traded for the potatoes because they had a strong demand for them. The potatoes were also connected to the reaffirmation of prestigious status since their consumption was organized into a feast that was only attended by men and appears to have been very formalized. Also, the potatoes were consumed along with whale oil, another prestigious trade item. Banfield describes the manufacture of this item in another article, describing the oil rendering process of the Ditidaht First Nations, another group that resided along the West Coast of Vancouver Island, "The oil [of the whale] is not half tried out by the half boiling process it undergoes; but what is, they carefully skim off and put in clean bladders for the purpose of eating with dried salmon, potatoes or other roots. The oil is considered a luxury, and sells high. With the Netinetts [Ditidahts] and Macaws [Makahs] it forms a valuable article of traffic." (Banfield August 28, 1858)

In another account by Banfield, he describes how the local people grew their own potatoes as well as traded for them. The prestigious value of the potato and its incorporation into ritual ceremonial feasting events underscores its importance to First Nation groups on Western Vancouver Island. This may indicate long standing practices of potato cultivation and consumption that predate Suttles' proposed introduction of the potato at Fort Langley in 1828, thirty years prior (1951).

Banfield's observations took place before the gold rush and the establishment of British Columbia as a colony. During this period, the population of non-natives on Vancouver Island was less than 700, and much of the west coast was uncharted and unknown to them. Although Banfield's writings often cast the local First Nations in a favourable light, he seems to be advertising the wonders of the coast in a bid to attract settlers. He talks about a land that is "well suited for settlement" (Banfield August 14, 1858). When describing the promises of what is now Barkley Sound and Port Alberni he proclaims, "All that is wanted to create a city is for immigrants to see it, settle and develop it" (Banfield Sept.3, 1858). These respectful and praiseworthy descriptions of the First Nations highlight Banfield's intentions of sharing their very productive land with them. Having said that, he never explicitly supports taking land from the First Nations, nor does he ever try to legitimize a European claim to the place.

Banfield met with an untimely death by drowning in Barkley Sound in 1862. His heirs on the Isles of Scilly requested that Anderson Thompson and Co. in London retrieve his effects (letter from Francis Banfield to Anderson Thompson, Jan. 8, 1863). It is interesting to note here that Gilbert Malcolm Sproat was the agent for Anderson Thompson and Co. in Alberni. Banfield's ethnographic writings and observations can be seen in Sproat's, Scenes and Studies of Savage Life, published in 1868, though they were somewhat altered to reflect the changing attitude of the settlers towards First Nations and land use (Sproat 1987 [1868]). Banfield's enthusiastic and hopeful nature was replaced by the negative writings of Sproat and later colonists who sought to exploit the land and people that Banfield had so respectfully described. These new colonial voices included Robert Brown and Joseph Trutch.

ROBERT BROWN - 1864

Robert Brown was a Scottish botanist and explorer who at the young age of 21 led the Vancouver Island Exploring Expedition in 1864, keeping a journal of his exploits along the way. Together, they travelled throughout Vancouver Island, encountering many indigenous settlements. In his description of the K'ómoks First Nation, he tries to justify and legitimize the developing colonial practice of taking First Nation land with no proper compensation

"Here as everywhere the Indians are growling about payment for their land...When traveling or sitting around the camp fire with them they always appeal to me on the subject & I assure you that it is no easy matter to answer the question satisfactorily when an intelligent [Indian] looks up in your face and asks 'Had you no good land of your own that you come and deprive us of ours?' I tell them that once upon a time the great good chief above gave all the earth to the White man and Indian alike. The White man took one part and the Indian another, but the Indian instead of cultivating his land went to war & was very wicked; but the white men increased and multiplied

and learned all things and filled all their Country: so the

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white man said to himself: see our land is full, we wish to grow corn and potatoes and rear Moo-Moos [Cattle] but our friend the Indian over the salt water does not care about corn and oxen but likes Salmon and Gummas [Camas]: he does not require all his land- so we will go and ask him to allow us to live in his land in peace and friendship. If we take any land he has need of, our chief good King George will pay for it. So if we have hurt and not benefited you by coming to live among you- send your Chiefs to have a talk with Mr. Kennedy & he will pay you if he thinks you speak straight- for he is a just man with a straight tongue that never lies. But my mind is you have got much good by us king Georges. When you came you were ragged in a skin blanket or a poor one that that you made out of bark or dogs-hair. You have now shirt & hat, trousers & boots. Who brought these among you? You would starve some winter if it was not for potatoes! Who gave you these? Was it not Mr. Yale at Fort Langley? And is he not a King George Man? Eh?"

(Brown 1989 [1864]: 124-125).

Not only is Brown's information about the potato dispersal inaccurate, it also misrepresents the symbolism that the early colonists and traders had previously imbued to the potato. Previously, the potato represented the progress of the First Nations, living in peaceful coexistence with the Europeans. The potato was the object of trade that benefited both whites and natives alike. Brown, however, uses the potato as an item that symbolizes superiority. In his eyes it is a guilt charged item that represents a debt that First Nations owe to Europeans in exchange for the introduction of the potato. His narrative legitimizes the encroachment of white settlers on indigenous land. Since the First Nations were not using the land in any 'proper' way, they do not, as Brown argues, "require all [of their] land" (1989 [1864]:125).

Brown's writing was influenced by changing indigenous land

rights policies that were brought forth by the new Kennedy governorship. Arthur Kennedy replaced Douglas as governor of Vancouver Island and enacted many oppressive land policies that acted to greatly reduce the land that was allocated to First Nations. This allowed more settlers to take up the land for their own use. His decision was influenced by Joseph Trutch, the Chief Commissioner of Lands and Works (Fisher 1971:3).

JOSEPH TRUTCH - 1864

Robin Fisher (1971) offers a chilling review of the changing land policies that occurred in association with this change in government as well as the increasing influence of Joseph Trutch. According to Fisher, Trutch was convinced that the previously laid out First Nation reserves were too big and were holding back development in these areas since First Nations held control of the land and settlers were only allowed to rent or lease that land off of them (Fisher 1971:7). Fisher quotes Phillip Nind, the Gold Commissioner at Lytton, who wrote in a letter in 1865 complaining to the Colonial Secretary about the First Nations of the Thompson River's usage of the land, claiming, "These Indians do nothing more with their land than cultivate a few small patches of potatoes here and there" (quoted in Fisher 1971:9). This quote shows that in 1865 potatoes no longer represented a 'great equalizer'. The potato was no longer used by Europeans in order to talk about the advancements or civilized characteristics of the First Nations. Instead, the potato represented a threat to the European's claim to the landscape because it was an accepted, 'civilized' practice of cultivation, which the Europeans recognized as being equal to their 'modern' subsistence practices. Potato cultivation was no longer a source of pride to the colonists, as it once had for early settlers like Douglas and Banfield.

Trutch enacted land policies that further reduced the land that was allocated to First Nations groups in the area. These policies not only ran counter to Douglas's earlier policies but they also ignored First Nation input. He carved out the best aboriginal land and offered it up for European use. Fisher uses the quote by the chiefs of the Lower Fraser River to depict the implications of land reallocation in 1868.

Some days ago came new men who told us that by order of their Chief they have to curtail our small reservation, and so they did to our greater grief; not only they shortened our land but by their new paper they set aside our best land, some of our gardens, and gave us in place, some hilly and sandy land, where it is next to impossible to raise any potatoes: our hearts were full of grief day and night. (quoted in Fisher 1971:16)

Thus land reallocation ended the profusion of potatoes in the Pacific Northwest. After this the First Nations people were given less and less freedom. Over time, many land rights were also taken away. Trutch went on from here to help iron out British Columbia's confederation with Canada in 1871. Under this agreement, First Nations were made wards of the Federal government and denied land ownership rights.

The potato went on to flourish in the gardens and farms of European settlers, but they seem to disappear in First Nations' plots with the exception of a few notable cases in Washington State and Alaska (Zhang et al. 2010). The potato served as a commodity, a food source, an elite status item and a symbol of progress for Europeans. During the time of the fur trade and the early colonial era, equality and respect towards the First Nations was critical for a number of pragmatic reasons. First, natives greatly outnumbered European traders and settlers, prompting settlers to maintain friendly relationships. Second, the European traders needed to maintain reciprocal trade relationships with First Nations peoples for economic reasons. With the increase of settlers in British Columbia and land tensions that arose as a result of the 1858 Fraser River Gold Rush, land became more important to both parties. Europeans sought ways of legitimizing claims to First Nation land. European claims to the land were tempered by the land policies of Trutch and other legislations that inhibited First Nation's agency and rights to land use.

CONCLUSION

The journals of explorers, traders, settlers and colonists provide a glimpse into the shifting perceptions and attitudes of Europeans. These writings call attention to the dynamic and shifting nature of European views towards aboriginal land use. The story of the potato in the early historic period of the Pacific Northwest is important and interesting because it highlights how the mutable social valuation of this one plant had the ability to make entire groups of people seem more 'progressive', 'advanced' and 'civilized' than another. This is seen in Scouler's evaluations of the Haida and Chinook Nations. As well, the perception of what cultivating the potato meant to Europeans also changed, as was seen in a comparison of the writings of Douglas, Banfield, Brown and Nind.

Not only has the valuation of the potato changed for Europeans in regards to First Nations' land practices, but the potatoes cultural implications have shifted as well. The Tla-oqui-aht came to value the potato as a prestigious trade item of deep cultural importance. Other nations, such as the Haida, the Tsimshian and the Makah capitalized upon the potato, supplying the demand for this product among groups like the Tla-oqui-aht and the European fur trade forts. As well, early settlers benefited from the potato trade. On the local level, the potato became a staple for many First Nations groups grew it in local plots using methods that were developed for more traditional tuber crops. The Ozette, Kasaan and Maria's potato varieties still serve an important role for First Nations communities.

The potato is a very important part of British Columbia's past and serves as a useful medium for understanding European and First Nations relations. As well, the potato's introduction is not as straightforward as it has been proposed (Suttles 1951). With new genetic information, the story of the potato is becoming more complex (Zhang et al 2010). This is an important consideration because it hints at possible histories that have not been told, including the possible movement of the potato into Mexico. It also challenges hegemonic European histories which pervade and colour nearly all current knowledge of past aboriginal agricultural practices. Many more questions still need to be asked and answered regarding the history of the potato on the west coast and its profusion in pre-colonial British Columbia.

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