

# Alcohol Cultures in Finland and Alaska: Explosive Drinking Patterns and Their Consequences

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## **Introduction**

Drinking cultures reflect collective behaviour and imply that changes within cultures generally occur in concert.<sup>1</sup> Historically-dominant uses of alcohol impact societies' alcohol cultures,<sup>2</sup> and research shows that the qualitative features of drinking patterns evolve slowly, over decades or generations.<sup>3</sup> Both Finland and Alaska developed binge drinking styles, and each region suffers from social pathologies related to this "explosive" drinking pattern. In the case of Finland, the pattern was set centuries ago, by internal geographical and socio-cultural forces. In Alaska's case, Russians and Euro-Americans who arrived in the eighteenth and nineteenth centuries brought with them an abusive "frontier" drinking style that some believe set the pattern for the state's alcohol-associated problems that disproportionately affect Alaska Natives.<sup>4</sup>

Numerous studies have shown that both the volume and pattern of alcohol consumption correlate with specific social pathologies. European studies show a correlation between higher consumption on single occasions (binge drinking or uncontrolled drinking) and higher levels of violence.<sup>5</sup> Generally, there is a north-south gradient in western Europe, where drinking is more sporadic but intense in more northern countries and more frequent but moderate in the southern countries. The latter, *wet*, culture is relatively rare in global terms; whereas the cultural norm of binge drinking, the *dry* culture, is much more common globally.<sup>6</sup> Finland's drinking culture exemplifies the dry culture with its historic pattern of sporadic consumption with "explosive episodes" that often coincide with violent and otherwise problematic behaviours.<sup>7</sup> Alaska's drinking culture lies closer to the centre of the wet-dry spectrum, though definitely on the dry side, with its high rates of pathologies associated with abusive drinking. In rural Alaska the drinking patterns and pathologies more closely resemble Finland's "explosive" drinking style.

In addition to level of consumption and drinking pattern, cultural norms affect the social pathologies associated with alcohol consumption, as MacAndrew and Edgerton argue in their classic text *Drunken Comportment: A Social Explanation*. They reject the conventional wisdom that alcohol consumption causes or leads to violent and otherwise antisocial behaviour. Noting broad variations in drunken comportment throughout the world, they conclude that behaviour changes result not from the disinhibitive effects of alcohol on the brain, as many assume, but from the degree of social tolerance for drunken behaviour in a given society. In other words, people learn the boundaries of drunken behaviour, just as they learn other social norms.<sup>8</sup>

Public policies both reflect and shape social norms. Finland's national alcohol policies have attempted to restrict both physical and economic access to alcohol in order to reduce total consumption and harm. Recently, European Union integration and increasing public resistance to such paternalism have limited Finland's alcohol policy options. The results are a sharp increase in consumption and related harm.

The United States, including Alaska, tried nationwide prohibition (as did Finland). Following its failure, alcohol policies have generally been state and local, although federal Indian policy prohibited sales to Native Americans until 1953. Following this change in federal policy, the flow of alcohol and related harms eventually overwhelmed rural and Alaska Natives, and the state responded with the Local Option, allowing rural Alaskans to prohibit sales and/or importation of alcohol to their villages. Over one hundred villages have some form of Local Option today. The vast majority of them are in "bush Alaska," that is, off the road system, which eases enforcement of the alcohol restrictions. Yet Alaskans, especially Alaska Natives continue to abuse alcohol disproportionately, and the social and economic costs are high. The University of Alaska Anchorage Institute of Social and Economic Research's "Status of Alaska Natives 2004 Report" focuses much of its attention on the "rampant alcohol abuse and the resultant 'culture of violence' within the Alaska Native community."<sup>9</sup>

Alaskans and Finns are well aware of the harms associated with their excesses in drinking, although many Alaskans likely are unaware that their rates of consumption and alcohol-related pathologies exceed the national mean, even among non-Natives. Yet there is resistance in both regions to policies that would limit personal freedoms or "punish" responsible consumers in order to reduce alcohol abuse and related harm. Despite the differences between Alaska's diverse population with a significant indigenous minority, and Finland's much more homogenous population (though it does have a small minority of indigenous Sami), a comparative analysis of the two northern regions' histories of alcohol abuse and related harms may be

useful to those interested in social problems and public policy in the north or elsewhere. Indeed, alcohol policy exemplifies the challenges that all societies face in striking a balance between liberty and order.

This article will address the development of Finland's and Alaska's drinking cultures and their policy responses to alcohol-related problems. An analysis of comparative consumption levels and a number of health implications and social pathologies follows.

### **Brief History of Finland's Alcohol Culture and Alcohol Policies**

#### *Development of a dry culture*

Beer was virtually the only alcoholic beverage in Finland until the latter 1600s. By the late 1700s, spirits had replaced beer as the dominant alcoholic beverage,<sup>10</sup> though home brewing the traditional *sahiti* remained popular. In the 1800s in agrarian Finland, home distillation of spirits was widespread. Successful growing seasons meant more excess grain distilled and higher consumption and mortality rates. "There seemed to be a bottomless yearning and thirst for distilled spirits."<sup>11</sup>

Irma Sulkunen writes in her history of the Finnish temperance movement that nationalism, temperance, Christian revivalism, and industrialization all contributed to Finland's progression from an agrarian grand duchy in the Russian Empire<sup>12</sup> to an industrialized, independent republic. Leaders of the nationalist and temperance movements believed that ridding Finland's working/peasant class of its destructive drinking habits was the key to Finland's prosperity. Thus, the Fennoman Friends of Temperance used the public education system to promote the construction of an independent Finland, in part by attempting to rid the people of alcoholism. Christian revivalism promoted abstinence as a means to individual improvement. "The drunkard was condemned to religious perdition...and socially he was declared a destroyer of the nation's vitality, a useless outcast."<sup>13</sup> These concomitant and related social movements produced restrictions on distilling rights and on spirits and beer sales in rural Finland in the 1860s,<sup>14</sup> and late in the century, the adoption of the Gothenburg system of local control of alcohol policy.<sup>15</sup> Finally, newly independent Finland enacted Prohibition in 1919.

Despite the appearance of strong public support for prohibition in Finland, public officials and private individuals alike flouted the law. Alcohol consumption doubled and perhaps tripled.<sup>16</sup> Much illegal production took place, physicians regularly wrote prescriptions for alcohol,<sup>17</sup> and smuggling was common.<sup>18</sup> In 1927 there were 25,000 arrests for public drunkenness.<sup>19</sup> Although total annual consumption of alcohol remained relatively low (under three litres of 100 percent alcohol at the highest), the rise occurred quickly, and

the structure of consumption changed from predominantly 40 percent vodka to 96 percent strong spirits,<sup>20</sup> which increased the likelihood of drinking-related violence.

In fact, violence, which had risen with the General Strike of 1905, shot up, and during prohibition homicide rates reached triple the 1800s rates. Murders typically involved young single men in industrial towns and cities who had consumed alcohol excessively.<sup>21</sup> Lehti asserts that the 1905 increase reflected a “radical change in the attitudes towards violence among working-class youth,” which he attributes to the late industrialization and slowness of political reforms in Finland. Lehti contends that the Civil War of 1918 induced in the farming sector this same tendency toward violence, not among the soldiers, but among the generation that just missed the Civil War.<sup>22</sup> He suggests that the correlation between intoxication and violence in Finland likens Finland’s drinking culture more to Russia’s than to Scandinavia’s.<sup>23</sup>

Pertti Alasuutari contends that Prohibition introduced another distinct element in Finland’s drinking culture: symbolic protest. Drinking came to symbolize working class defiance of the White bourgeois who implemented Prohibition after winning Finland’s Civil War of 1918. The state continued to enforce numerous trade restrictions following Prohibition, and despite later liberalization of alcohol policies, drinking still represents protest in Finland, he argues.<sup>24</sup>

Following a referendum in 1932, Finland ended Prohibition and began an alcohol policy centred on state monopoly of the production, import, export, distribution, and sale of alcoholic beverages. As in Norway and Sweden, this comprehensive alcohol policy coincided with the development of the welfare state. *Alko*, the state alcohol monopoly, set both off- and on-premise prices and established serving practices in restaurants;<sup>25</sup> until the 1980s *Alko* limited quantities in off-premise sales.<sup>26</sup> Policies designed to reduce total alcohol consumption have included limiting advertising and private profits, restricting retail sales hours, maintaining high prices, and limiting private importation of (less expensive) alcohol.<sup>27</sup>

Twentieth-century Nordic alcohol policies have been called a “spectacular historical experiment in social control.”<sup>28</sup> Until the 1990s, these restrictive policies aimed at reducing alcohol-related harm met with widespread acceptance in the Nordic countries. And the Nordic states had among the lowest total consumption levels of alcohol in Europe. Yet the alcohol-related harm experienced by Nordic peoples, particularly Finns, was disproportionately high, at least partly owing to the Nordic pattern of binge drinking.

Finland’s personal control system was gradually relaxed between the late 1940s and 1971.<sup>29</sup> Total consumption rose as alcohol became more accessible, attesting both to the effectiveness of restrictive policies and the resilience of

Finland's Nordic drinking culture. In 1969, the Finnish government attempted to "Europeanize" or "civilize" Finnish drinking habits; that is, to encourage Finns to drink less potent alcohol, perhaps on more frequent occasions, but in smaller quantities. The Alcohol Act allowed the sale of medium strength beer in licensed grocery stores and cafes, rather than only in *Alko* stores and licensed restaurants. At the same time, the ban on *Alko* stores in the countryside was lifted. Alcohol consumption, as measured in 100 percent alcohol, rose by 46 percent. Beer consumption rose by 125 percent, with medium beer consumption (less than 4.7 percent alcohol) rising by 242 percent. Spirits consumption rose by 12 percent.<sup>30</sup>

The increase in total consumption resulted in a dramatic increase in the number of alcohol-related hospitalizations. Consumption increased among all levels of consumers, but the heaviest initial consumers increased their drinking the most, in absolute terms.<sup>31</sup> Finally, in 1975, taxes on alcohol were raised in order to halt the rise in consumption.<sup>32</sup> Empirical evidence has borne out the premise of the *total consumption model*, that heavy consumption and harm (particularly cirrhosis of the liver) rise as total consumption rises.<sup>33</sup> In fact, several Nordic studies have shown that, as was the case with Finland's 1969 Alcohol Act, liberalization of alcohol policies has the greatest impact on those whose drinking was limited by the policy, often the heavy drinkers.<sup>34</sup>

Alcohol consumption doubled throughout Europe between 1969 and 1975, owing mostly to rising standards of living, but the increase was most dramatic in Finland. Finland rose from having the lowest total consumption of the Nordic states in 1950 to having by far the highest consumption among Sweden, Norway, and Finland in the mid 1990s;<sup>35</sup> Finland rose from lowest to fifth lowest place.<sup>36</sup> A Finnish study done in the 1990s showed that the traditional pattern of binge drinking strong spirits had strengthened throughout the population, across age groups.<sup>37</sup> Statistics showed that Finns drank more than twice as much spirits per capita as did Norwegians and 50 percent more spirits than did Swedes.<sup>38</sup> Thus, a rise in total consumption in Finland has disproportionately negative consequences compared with a country with a more integrated drinking culture, owing to the Finns' tendency to drink excessive amounts on single occasions.

#### *Liberalization in the 1990s*

In the 1990s, the public's desire for liberalization of its alcohol policy and its eagerness to be free from the "nanny state" seemed to have eclipsed memories of the dramatic rise in consumption and the rise in alcohol-related harm that occurred with Finland's 1969 sale of medium beer in grocery stores. Alcohol controls relaxed in Norway, Sweden, and Finland, especially during the mid 1990s, with the European Economic Area Agreement (EEA) of 1994 and with

Sweden's and Finland's European Union (EU) membership in 1995.<sup>39</sup> EU membership required that the Nordic states abandon their state monopolies on alcohol production, import, export, and wholesale; they maintained only their monopolies on retail sales of spirits, most wines, and strong beer.<sup>40</sup> However, as noted above, public pressure to liberalize Nordic alcohol policies predated the EEA and Sweden's and Finland's memberships in the EU.<sup>41</sup> Public opinion within the Nordic countries had increasingly stressed the notions of consumer sovereignty and personal choice.

Finland's response to the "challenge" of maintaining its alcohol policies (holding total consumption down) in light of limitations on state sovereignty associated with EU membership was distinctly different than Sweden's.<sup>42</sup> Alcohol researchers Karlsson and Tigerstedt observe that as Finland revised its alcohol policies in accordance with EU policies, "the state made no attempts at trying to argue either on behalf of or against the old alcohol policy system." Karlsson and Tigerstedt contend that no "profound reflection over the justification and self-consciousness" of Finland's alcohol policy took place during the 1990s, a selective "amnesia" having set in. Whereas Sweden continuously, "almost exhaustively," revisited the justification for its alcohol policy, endeavored to maintain it and to raise consciousness within the EU of the harm related to alcohol consumption, they say Finland readily adjusted to European norms.<sup>43</sup>

This openness to EU pressure to relax its alcohol policies can be viewed as a manifestation of the Finns' eagerness for expansion of freedoms in the post Soviet era. During the period 1993–1997, newspapers in Finland argued for liberalization of alcohol policy. According to newspaper editorials, "the restrictive alcohol policy of the state had a suppressing effect on the free functioning of the market, prevented consumers from exercising their freedom of choice, and infringed on the autonomy of citizens." Editorials recommended allowing wine sales in shops, rescinding import quotas, reducing alcohol taxes, and liberalizing the Alcohol Act which, among other things, forbid drinking in public places.<sup>44</sup>

In 1995, the Finnish government rescinded its ban on drinking in public places. The rationale was that permitting public drinking would promote informal social regulation of drinking and encourage Finns to move toward the "continental" style of drinking—daily consumption of small to moderate amounts of alcoholic beverages with meals.<sup>45</sup> Almost immediately after the ban on drinking in public was lifted, disruptive behaviour related to alcohol consumption raised alarm. Criminal activities and "brawling" became commonplace, as did urinating on street corners and raucous behaviour. Initially, newspaper editorials almost always referred to such disturbances as corollaries of freedom, and they resisted calls for restricting individual

freedoms.<sup>46</sup> However, when after five years, no “civilization” of Finnish drinking habits had taken place, calls for revisiting the Alcohol Act increased. In 2003, the government, after extended debate, passed a new Act on Public Order that banned drinking in public places, but permitted “picnic style” drinking in parks, which were defined as “small park-like forest stands.”<sup>47</sup> The objective was to eliminate raucous behaviour in town squares and on streets.

#### *The Full Impact of EU Integration in 2004*

Though Finland entered the European Union in 1995, it had been able to maintain, through a temporary derogation, its traveller import quotas on alcoholic beverages purchased within the EU until January 1, 2004. On that date, EU policy compelled Finland (and Sweden) to rescind quotas, which had limited residents who travelled abroad to bringing in duty-free one litre of distilled spirits, three litres of intermediate beverages (such as liqueurs and strong wines), five litres of wine, and sixty-four litres of beer.<sup>48</sup> In anticipation of Estonia’s May 1, 2004 entry into the EU, which would give Finns access to much less expensive alcohol, duty free, the Finnish government on March 1 sharply reduced alcohol excise taxes.<sup>49</sup> The tax reductions resulted in steep price reductions in *Alko* shops with the greatest impact on vodka prices.<sup>50</sup>

The week of the tax reduction, *Alko* sales in Finland rose 44 percent above that week the previous year.<sup>51</sup> The average increase in sales of distilled spirits following the first week (with an abnormal spike), until Estonia’s entrance into the EU, was 34 percent.<sup>52</sup> The growth rate diminished subsequently. There was a shift away from table wine to vodka,<sup>53</sup> the public health implications of which are not favourable. Following the price reductions of March 1, 2004, arrests for drunken driving increased by 20 percent and arrests for public drunkenness increased by 30 percent.<sup>54</sup> Despite the reductions in excise taxes, incentives for Finns to travel to Estonia to purchase alcohol remained high following the abolishment of private import quotas. Prices on all forms of alcohol remained significantly lower in Estonia.

How Finland will respond to this public health and safety challenge is unclear. The government’s 2004 Alcohol Program emphasized more directly than those of the late 1990s the prevention and reduction of alcohol-related problems, focusing on local level prevention, and it provided for the development and evaluation of local alcohol prevention measures in two regions.<sup>55</sup> Helsinki’s main newspaper, *Helsingin Sanomat* called the program “toothless,” saying it builds more on hope than realism in an article headlined “The state gives up on drunkenness.”<sup>56</sup>

While the timing suggests that recent changes in Finland’s alcohol policies have been necessitated by EU membership, in fact, public pressure to liberalize alcohol policy had been building for some time. Hence the absence of hand

wringing as Finland “acquiesced” in the EU’s requirements. Few Finns appeared to mourn the loss of the state’s paternalistic alcohol policies that had inhibited their natural inclinations and cost them sorely.

Yet, liberalization of Finland’s alcohol policy has had significant detrimental effects on public health and safety. Alcohol consumption, which had been rising for nearly a decade, rose sharply after Finland’s March tax reductions. Alcohol-related violence and accidents rose, as did alcohol mortality. Statistics Finland reported that in 2005, alcohol mortality was the leading cause of death for working aged men, having surpassed ischaemic heart disease, which had been the leading cause for decades. Among working age women in Finland, alcohol mortality was nearly tied for first place with breast cancer among causes of death in 2005.<sup>57</sup>

Statistics and analysis of Finland’s and Alaska’s current alcohol consumption and related harms follow the section below on Alaska’s experience with alcohol. Both regions face extraordinary challenges in developing harm reduction policies in response to their abusive drinking cultures.

### **Brief History of Alaska’s Experience with Alcohol: From Colony to Statehood to Local Control**

#### *Colonial Frontier*

Although some Alaska Natives may have produced alcohol from fermented berries, Europeans, as they entered various regions of Alaska, introduced most Alaska Natives to alcohol. In the eighteenth century, the Aleuts and Koniag, and later other Alaska Natives, learned from Russian fur traders how to make *kvass*, a beverage brewed from grain, apples, or roots. An imperial edict forbade Russians from trafficking in alcohol or operating stills,<sup>58</sup> yet they consumed copious amounts of distilled liquor, and the Russian-American Company supplied workers with liberal quantities of alcohol to secure their loyalty and to keep them in debt to the Company. These policies applied to some Alaska Native workers and to mixed-blood workers.<sup>59</sup> The Tlingit of Southeast Alaska apparently came into contact with alcohol first in 1790 via a French ship. Subsequently, New England trading ships exchanged firearms and alcohol for furs with the Tlingit.<sup>60</sup>

French-Canadians commonly used alcohol in trading for furs with Indians throughout North America, despite a 1657 decree forbidding such trade.<sup>61</sup> In the 1820s Russia signed agreements with Great Britain and the United States that prohibited the selling of alcohol and firearms to Alaska Natives, but these agreements were not enforced. Finally in the 1840s, the Hudson’s Bay Company decided to stop selling alcohol to Natives, as a result of alcohol-related violence, reducing the flow of alcohol into villages on its trade network.

However, in Russian-American settlements, alcoholic beverages were easily accessible to non-Natives, and drunkenness was ubiquitous.<sup>62</sup>

In 1873, six years after America's purchase of Alaska, Congress extended to Alaska the 1834 law that prohibited the sale of "spirituous liquors" to Indians, and it banned distilleries in Alaska. Yet, widespread alcohol abuse continued among non-Natives and Natives, particularly among soldiers stationed in Alaska. The Tlingit apparently learned how to make distilled liquor, or "hootch," shortly after Alaska's purchase, and much abusive consumption followed.<sup>63</sup>

In violation of U.S. law, trading and later whaling ships brought brandy, rum, and whiskey to trade with the Eskimos of the far north.<sup>64</sup> In 1881, John Muir described the utter devastation alcohol abuse had caused the Eskimos of St. Lawrence Island. Yet, he related, it was the only medium of exchange they would accept.<sup>65</sup>

The First Organic Act of 1884 established Alaska's civil government. It prohibited the importation, manufacture, and sale of intoxicating liquors, except for medicinal and scientific purposes. Despite this prohibition, the flow of liquor into the territory increased. What enforcement did take place tended to target Natives.<sup>66</sup>

At about the turn of the twentieth century, Alaska's gold rushes brought thousands of prospectors into the area, along with copious quantities of whiskey, rum, brandy, and beer. Alaska Natives again were exposed (many in the interior of Alaska for the first time) to the intemperate drinking habits of non-Natives.<sup>67</sup> Miners were notorious for their tendency toward drunken brawls, which often ended in deaths.<sup>68</sup> Since the Russian era, Alaska Natives had witnessed the abusive drinking habits of non-Natives, behaviours that whites tacitly condoned.<sup>69</sup>

On the other hand, missionaries and European officials condemned alcohol use by Alaska Natives, and this may have contributed to its perception by Natives as a valuable commodity that was to be consumed rapidly whenever it could be found.<sup>70</sup> Fortune notes that a missionary in Wrangell sent a Stikine Indian to destroy a still made by Angoon Indians, and "a general melee" followed.<sup>71</sup> Missionary Axel Karlson found alcohol abuse to be one of the main health problems among the Natives in the Unalakleet area in the late 1880s.<sup>72</sup> Fortune writes that missionaries in general "bitterly opposed" both alcohol manufacture by their parishioners and the import of whiskey into villages by traders.<sup>73</sup> This moral condemnation of alcohol consumption was typical of Protestant temperance movements that were much more prevalent in *dry* alcohol cultures, where ambivalent attitudes developed toward alcohol. In *wet* drinking cultures, where alcohol is seen as a banal component of meals, no such moral implications of alcohol use developed.<sup>74</sup>

In 1913 the newly formed territorial legislature passed a law prohibiting giving or selling liquor to Natives. This law remained in effect until 1953.<sup>75</sup> In response to a 1915 vote by Alaskans, Congress passed the Bone Dry Law prohibiting the manufacture and sale of alcohol anywhere in the territory.<sup>76</sup> The law was poorly enforced, but again, disproportionately enforced against Alaska Natives.<sup>77</sup> The Bone Dry Law was repealed in 1934, but only for whites.<sup>78</sup> In 1936 the Indian Reorganization Act of 1934 was applied to Alaska, and the Bureau of Indian Affairs encouraged Alaska village councils to establish and enforce ordinances prohibiting liquor possession and use.<sup>79</sup>

The health implications of alcohol abuse in Alaska in the Russian and early American era can hardly be overstated. The binge drinking practices of Russian fur traders and later American soldiers, sailors, and miners arguably left a lasting mark on Alaska Natives. Violence resulted directly in injuries and deaths. Drownings, frostbite, accidental burns, and pneumonia were indirect results of intoxication. Failure to hunt and fish at critical times resulted in hunger and starvation.<sup>80</sup> Many believe that the pattern had been set for an abusive binge drinking culture, based on the style of drinking modeled by those who had introduced alcohol to Alaska.

### *Statehood*

Following statehood in 1959, unincorporated Native villages could no longer ban liquor sales and possession. With moderate and non-offensive consumption of alcohol now legal, village councils were ineffective in controlling alcohol related disturbances.<sup>81</sup> Some village councils developed sets of mostly alcohol-related offences, which councils had the legal authority to prohibit. However, state reinforcement was not forthcoming, and Conn suggests that councils on their own lacked local legitimacy in this role as enforcers of laws that had not been developed as social norms within the villages.<sup>82</sup>

As the state's transportation and communications systems reduced the isolation of Alaska villages, and as standards of living improved with 1960s anti-poverty programs and the 1971 Alaska Native Claims Settlement Act, alcohol's presence and related problems in Native communities skyrocketed.<sup>83</sup> A 1975 survey of rural and urban Alaskans<sup>84</sup> showed a high level of awareness of alcohol problems in the state and in respondents' communities, with a greater awareness of alcohol-related problems in rural areas.<sup>85</sup>

High levels of ambivalence toward alcohol consumption in general were found in rural villages, with only about half of the rural respondents expressing general approval of drinking, whereas 83 percent of those in the urban communities expressed approval.<sup>86</sup> About 50 percent of rural respondents felt that restricting physical access to alcohol might reduce alcoholism, whereas only 20 percent of urban residents felt that restricting access would help.<sup>87</sup>

The survey showed striking variability among rural communities' views on whether individuals were responsible for their behaviour while drunk. In one village 30 percent felt that individuals were responsible for their drunken behaviour and in another 80 percent held individuals responsible.<sup>88</sup> In both villages overwhelming majorities deemed drunkenness a problem locally.<sup>89</sup> Nearly 80 percent of rural respondents felt that their villages should be doing more about alcoholism.<sup>90</sup> Although the study inquired about *perceived*, as opposed to actual, drunkenness in villages, the disparity in attitudes regarding personal responsibility lends credence to MacAndrew and Edgerton's thesis that drunken comportment is a function of societal norms.

In 1988, the *Anchorage Daily News* published a Pulitzer Prize winning series *A People in Peril*, which brought to the public's attention the debilitating consequences of alcohol abuse and addiction in many Alaska Native villages<sup>91</sup> and generated much discussion throughout the state. Alaska's consumption rates, binge and heavy drinking rates, and alcohol mortality were among the highest in the nation. Rates for dependency and harm were much higher for Alaska Natives than non-Natives. Alaska's Fetal Alcohol Syndrome (FAS) rate was the highest in the county, and by some measures, in the world.<sup>92</sup> The FAS rate among Alaska Natives was more than three times higher than the rate among non-Natives.<sup>93</sup> At the turn of the twenty-first century, Alaska Native villagers died from injuries at close to five times the national rate, and alcohol was a factor in most of these deaths.<sup>94</sup> By all measures, the situation was catastrophic.

#### *The Local Option*

In response to the dramatically increased incidence of alcohol-related disturbances in villages in the 1960s and 1970s, village leaders asked the state legislature to strengthen the *local option law* to enable Native communities to combat the serious alcohol problems they faced. In 1980, the Alaska legislature extended the Local Option law, which since 1937 had allowed municipalities to ban alcohol sales, to allow municipalities and unincorporated villages to ban the sale, importation, and possession of alcohol by majority votes in the communities. In the 1980s and 1990s nearly one hundred villages held Local Option elections; in the vast majority of cases they applied greater restrictions. Several communities have reversed their decisions and then reapplied restrictions when alcohol-related problems rose sharply.<sup>95</sup>

A 1985 study of the effects of the Local Option in four northern communities revealed that it had reduced public drunkenness and violence.<sup>96</sup> Residents sensed that the Local Option had not reduced alcohol *availability* significantly, but felt that behaviours had changed.<sup>97</sup> Broad community support to provide peer pressure and other forms of informal social control, along with external

support from the state troopers for the Village Public Safety Officers, was critical to the effectiveness of the Local Option.<sup>98</sup> Villagers often expressed resentment about the extensive individual rights protections that frustrated the intent of the Local Option.<sup>99</sup> Nevertheless, villagers in this study were certain that it had reduced alcohol problems in their villages.

Numerous studies have shown that alcohol-related problems were much less prevalent in *dry*<sup>100</sup> villages. A thorough-going study of fourteen years of data on alcohol-related incidents in *wet* (without special local restrictions), *damp* (no alcohol sales) and *dry* (no sales, importation or possession) villages found a significant reduction in accident and suicide rates in communities that went from wet to damp and a striking reduction in accident and homicide rates in communities that went dry. The researchers caution that the number of damp communities was so small that they were reluctant to draw the conclusion that damp status was more effective than dry status in reducing injury deaths and suicides. The study found that restrictive measures may have prevented 117 deaths between 1981 and 1993.<sup>101</sup> Injury deaths were reduced by 20 percent. Most striking was the finding that homicide death rates fell from 9 to 2.6 times the national rate in 1990. Importantly, the study found no evidence that alcohol-related problems were being exported to other wetter villages or hub communities when villages chose the Local Option.<sup>102</sup> As of March 2007, nineteen Alaskan villages banned sale and seventy-eight banned sale and importation of alcoholic beverages, with twenty-nine of the latter also banning possession and four other villages banning possession.<sup>103</sup>

The Alaska Advisory Board on Alcoholism and Drug Abuse reports that there is broad consensus across the state that solutions to alcohol abuse must be developed within communities and it advocates programs that “support and empower communities, champion a culture (that) is not heavily influenced by alcohol, and create a more productive and healthy Alaska.”<sup>104</sup> In Alaska’s diverse population with widely variable local environments, only community-based programs can reflect the proscriptive social norms that must undergird any legal framework for addressing anti-social alcohol-related behaviour. As recent statistics of alcohol-related homicides, suicides, and other crimes and accidents attest, the Local Option is no panacea. However, it has shown promise in remote Alaska villages.

## Data, Research and Comparative Analysis of Alcohol Consumption and Pathology

### *Alcohol Consumption Rates and Mortality*

Binge drinking cultures in Finland and Alaska produce devastating health and social effects, and the cultures are stubbornly resistant to change, as has been seen in Finland's failed attempts to "civilize" its culture and in the continuing high rates of alcohol-related social pathologies in Alaska despite widespread recognition of the problems. Table 1 below shows alcohol consumption in the United States, Alaska, Finland, Sweden, and Norway in litres of 100 percent alcohol. The Nordic states differentiate between recorded consumption (sales) and total consumption (sales plus consumption of alcohol obtained through legal and illegal importation, along with home production) because unrecorded consumption is such a high percentage of total consumption (20–30 percent). Nordic researchers thus use sales statistics and population surveys to estimate total consumption.

Note that Alaska's consumption is higher than the United States mean consumption level. Finland's total consumption is not substantially higher than Sweden's, but its pattern of drinking is much less integrated (more sporadic and explosive) than Sweden's.

Table 1: Per Capita\* Alcohol Consumption Rates

Country	Consumption in Litres of Pure Alcohol		Data Source
	Recorded	Est. Total	
USA	8.44 (2004)		Lakins, et al., Surveillance Rept #78, 13–14
Alaska	9.46 (2005)		Alaska Department of Health and Social Services, Moving Forward
Finland		10.3 (2006)	STAKES Quick Facts
Sweden		10.2 (2005)	Ramstedt, 2007, 76
Norway		7.5 (2004)	Rossow, 2007, 61

\*Based on populations 15 and older in Scandinavia, and 14 and older in the United States.

Table 2 below shows the alcohol mortality rates for the same four countries and Alaska. Alcohol mortality includes deaths from alcohol psychosis, alcohol dependence, cirrhosis of the liver, and alcohol poisoning. Caution should be used in making cross-country comparisons of alcohol mortality rates, owing to differences in percentages of deaths autopsied and because of varying criteria for a determination that a death was alcohol related. Nevertheless, we can

see that Finland’s and Alaska’s alcohol mortality rates are substantially higher than their Nordic and American contexts respectively.

Table 2: Alcohol Mortality Rates per 100,000 Population

Country	Rate	Data Source
USA	7.1 (1999–2003)	National Vital Statistics Reports, Vol. 54, No. 12
Alaska	19.5 (2005)	Alaska Division of Health and Social Services 2005 Annual Report (Deaths, 10)
Finland	32.2 (2003)	Nordic Alcohol Statistics 1993–2003, English Supplement, 206
Sweden	14.1 (2002)	”
Norway	10.9 (2003)	”

Finland’s mortality rate is more than twice Sweden’s rate and nearly three times Norway’s rate, and the primary reason for this is the high incidence of alcohol poisoning in Finland. In 2005, alcohol mortality was the leading cause of death among working age men in Finland.<sup>105</sup> Note that Alaska’s mortality rate is nearly three times the U.S. mean. Alcohol-induced causes were the fourth leading cause of death for Alaska Natives and the eighth leading cause of death for white Alaskans in 2005.<sup>106</sup>

#### *Alcohol Poisoning*

Alcohol poisoning warrants special attention because of the striking impact that it has on total alcohol mortality in Finland. Poikolainen did a study of alcohol poisoning mortality in the Nordic states between 1967 and 1971 and found that the Finnish (particularly male) rate, measured in person years of lost life, was more than four times Norway’s rate, more than six times Sweden’s rate and more than fifteen times Denmark’s rate.<sup>107</sup> Poikolainen attributed the differences in alcohol poisoning rates mainly to the “variations in uncontrolled alcohol consumption, aimed at producing a state of deep intoxication.”<sup>108</sup>

Early in the twenty-first century Finland’s alcohol poisoning mortality for males is at least seven times higher than other Nordic rates at 14 deaths per 100,000. The rates for males in other Nordic states range from .2 to 2 deaths per 100,000. Finnish women’s alcohol poisoning mortality rates are 3-4 per 100,000, versus the highest other Nordic rate of .6 per 100,000.<sup>109</sup>

Rates of alcohol poisoning in the United States are much lower. When considering only the cases where alcohol poisoning is determined to be the underlying cause of death, the rate was .11 per 100,000 population between 1996 and 1998. Using the multiple cause method, when alcohol poisoning was a contributing factor, the rate was .49 per 100,000.<sup>110</sup>

#### *Violence and Alcohol*

Overwhelming evidence exists of the relationship between alcohol, drugs, and violence. Estimates are that in rural Alaska alcohol or drugs are a factor in 80 percent of crimes.<sup>111</sup> Wiklund and Lidberg note that “the best known and the intuitively most likely hypothesis [on causation] is that alcohol functions as a disinhibiting factor that diminishes the efficiency of impulse control mechanisms.<sup>112</sup> Although the issue of causation remains contentious, increasingly, researchers recognize the importance of social context in understanding the connection between alcohol and violence.<sup>113</sup> As noted above, MacAndrew and Edgerton found a variety of responses to inebriation in various cultures. The following sections address comparative suicide, homicide, and domestic violence and sexual assault rates.

*Suicide and alcohol.* Numerous studies have shown a correlation between suicide and alcohol consumption. The World Health Organization (WHO) October 2006 report says that more than 90 percent of people who committed suicide had suffered from depression, schizophrenia, or alcoholism, or a combination of mental health and substance abuse problems.<sup>114</sup> Ramstedt notes that rates of suicide and population-level alcohol consumption do not correlate neatly; the relationship is complex and related also to cultural factors, such as the prevalence of binge drinking.<sup>115</sup> Drawing upon Durkheim’s theory of weak social integration and poor normative regulation to explain suicide (though Durkheim dismisses alcohol as a causative factor in suicide), Ramstedt speculates that the causal factor of alcohol in suicides may be related to such conditions as social isolation and unemployment related to problematic drinking behaviours, as well as the impulsive behaviour that intoxication may precipitate.<sup>116</sup>

Finland’s suicide rates are much higher than those of the other Nordic countries. Finland’s suicide rates generally increased about 10 percent between 1980 and 1995.<sup>117</sup> Ramstedt studied the relationship between alcohol and suicide in Europe and found a significant positive relationship between changes in per capita consumption and gender-specific suicide rates, particularly among men in northern Europe. Based on WHO suicide data for the years 1950–1995, Finland had by far the highest suicide rate among men fifteen years of age and older, with a rate of 56 per 100,000 population. The average rate for Finnish

women was much lower at 13.<sup>118</sup> Statistics Finland reports that just under one-third of suicides in 2005 were committed while the victim was drunk.<sup>119</sup>

Alaska's suicide rate is much higher than the U.S. mean rate, especially for Alaska Natives, but also for non-Natives. In 2004, Alaska's was the highest rate in the nation at 23.4 per 100,000.<sup>120</sup> Teenagers and young adults in Alaska have the highest rates of suicide,<sup>121</sup> whereas nationally the 80+ age group has the highest rate, followed by the 40–49 year old group.<sup>122</sup>

Alaska's suicide rates vary dramatically by region, from more than 70 per 100,000 per year between 1996 and 2005 in two northwest regions to 10.9 in the Aleutians.<sup>123</sup> A follow-back study on the 426 suicide deaths in Alaska between September 2003 and August 2006 found that in 43.7 percent of the cases alcohol was involved.<sup>124</sup> Kelso and Dubay conducted a sociological and epidemiological literature review on Alaska Natives and alcohol which cited numerous studies showing a correlation between alcoholism or alcohol abuse and suicide.<sup>125</sup>

Suicide rates for Alaska Natives have risen sharply in the last half century. In the decades prior to the 1960s, suicide rates among Alaska Natives mirrored national rates. Between 1961 and 1965, the Alaska Native suicide rate was 13 per 100,000. By 1986, the rate was 67.6 per 100,000 population.<sup>126</sup> As noted above, much socioeconomic change took place in rural Alaska during this era, including rapid economic growth associated with the discovery of oil at Prudhoe Bay in 1968, the Alaska Native Claims Settlement Act in 1971, and the construction of the Alyeska pipeline in the mid 1970s. The infusion of cash into rural villages, the reduction in subsistence activities, and the introduction of television, which brought western culture to virtually all villages in a relatively short period of time, all are thought to have contributed to the increase in Native suicides during this era.<sup>127</sup>

Table 3 displays the suicide rates in the United States, Alaska, and three Nordic countries.

*Homicides.* Finland's homicide rate is exceptionally high among the Nordic States and for the European Union; at 3 victims per 100,000 in the 1990s, it is about triple the rate of the other Nordic states. Homicide rates in eastern Europe are similar to or higher than Finland's currently, but this high rate appears to be related to current social and economic distress, as opposed to Finland's relatively stable (high) rates for the last thirty years, which are lower than earlier in the twentieth century. The high Finnish rates have long been attributed to alcohol consumption, Finland's "violent drinking habits."<sup>128</sup>

Table 3: Suicide rates in the United States, Alaska, Finland, Sweden, and Norway

Area/Group	Rate	Time Period	Source
United States	10.5–11.5	1997–2005	Annual Report of Alaska State Suicide Prevention Council 2007
Alaska	16.5–23.4	1997–2005	”
Male	32.1	1997–2005	”
Female	8.7	1997–2005	”
Alaska Natives	28.3–50.7	1997–2005	”
Non-Native	13.8–19.2	1997–2005	”
Finland	28.2–35.7	1980–1995	WHO data, Holder et al, 162
Male	56	1980–1995	WHO data, Ramstedt 2001, S65
Female	13	1980–1995	”
Sweden	15.3–22.5	1980–1995	WHO data, Holder et al, 162
Male	34	1980–1995	WHO data, Ramstedt 2001, S65
Female	13	1980–1995	”
Norway	14.6–20.4	1980–1995	WHO data, Holder et al, 162
Male	18	1980–1995	WHO data, Ramstedt 2001, S65
Female	6	1980–1995	”

Of the Finnish homicides in 2002, 57 percent of offenders and 49 percent of victims were labeled alcoholics by the investigating police.<sup>129</sup> In Finland, Sweden, and Norway, the majority of offenders are middle-aged unemployed alcoholics. The rate of *non*-alcohol related homicides is relatively similar in the three Nordic states, so it is the “alcohol-related violence of this group” of middle-aged male alcoholics that makes Finland’s homicide rate stand out.<sup>130</sup>

The United States’ homicide rate is one of the highest in the western world, with an estimated 5.6 homicides per 100,000 in 2005.<sup>131</sup> Alaska’s homicide rate in 2005 was 4.8 per 100,000.<sup>132</sup> Thus, Alaska’s homicide rate was not exceptionally high among the American states, but was very high by Western standards and much higher than the Nordic rates. Between 1999 and 2003 there was an average of twenty homicides a year attributable to alcohol or other drugs,<sup>133</sup> in a state with a population just over 670,000.

*Domestic violence, sexual assault, and alcohol.* Alcohol abuse plays a significant role in domestic violence in Finland and Alaska. In Finland, an average of

twenty to thirty-five intimate-partner homicides with female victims took place each year between 1990 and 1999, which was more than twice the per capita rate of Sweden for such crimes. In these Finnish homicides 80 percent of offenders and 72 percent of victims were under the influence of alcohol at the time of the crime. Alcohol apparently was less a factor in Sweden; 44 percent of offenders and 37 percent of victims were under the influence.<sup>134</sup>

International comparisons of crime rates, especially rape, should be made with caution owing to differing definitions of rape, rates of reporting, and reporting procedures. However, data from the Seventh United Nations Survey of Crime Trends and the Operations of Criminal Justice Systems for 1998–2000 suggest that rates of reported rapes in the United States are about three times as high as those in Finland. The Finnish rate was 11 and the U.S. rate was 30 per 100,000.<sup>135</sup>

Alaska has the highest rate of forcible rape in the United States at 82 per 100,000.<sup>136</sup> The average U.S. rate between 1982 and 2001 was 40. A study of the sexual assaults between 2000 and 2001 in Anchorage, Alaska's largest city, showed that 60 percent of the victims<sup>137</sup> and 76 percent of the suspects had consumed alcohol prior to the assault.<sup>138</sup>

#### *Accident and Injury Mortality*

Accident and injury mortality are highly associated with alcohol consumption, especially with binge drinking. Finland's *male* accident mortality is much higher than that of other Nordic countries at 80–85 per 100,000, with 45 in Norway and 35 in Sweden. *Female* accident mortality is 25 per 100,000 in Finland, with Norway and Sweden respectively much lower.<sup>139</sup> The relationship between accidents and alcohol is particularly high in Finland. Two studies from the 1990s showed that well over 50 percent of accidental drownings were alcohol related: one showed 73.5 percent of male drownings and 58.9 percent of female drownings were alcohol related. Another showed 63.3 percent of drownings were alcohol related.<sup>140</sup> In their study of accident and violent deaths in Finland between 1987 and 1996, Lunetta et al. concluded that alcohol was a pervasive risk factor in many types of accidents, "and it may play a special role in young adults, in that it may decrease the threshold for suicide ideation and, more generally, impulsive behaviour."<sup>141</sup> Statistics Finland reported that the incidence of death from accidental falls had increased in 2005, and nearly half of the victims were drunk at the time of their falls.<sup>142</sup>

Injuries, including those resulting in death, are a large public health concern in Alaska, as well. In 1992, Alaska had the highest age-adjusted injury mortality rate in the United States. A study on injury deaths between 1990 and 1993 in rural Alaska villages of fewer than 1,000 residents found 65 percent of the 200 injury deaths for which blood alcohol concentration (BAC) levels were

available (of 302 deaths) were considered alcohol related, with BACs greater than or equal to 80 mg/dl.<sup>143</sup>

Between 1996 and 1998, Alaska was second in the nation in unintentional poisoning deaths. Alaska was highest by far in unintentional drownings (6.45 per 100,000 versus the next highest of 2.93, having come down from nearly 13 per 100,000 in 1989). Alaska was second highest in unintentional fire and burn related deaths.<sup>144</sup> In 2003, there were 19.5 deaths per 100,000 from injury by firearms, compared to the national mean of 10.3. Only the District of Columbia had a higher firearm injury death rate than Alaska.<sup>145</sup>

### *Child Welfare*

Empirical studies of the burden of alcohol seldom consider the harm that those other than the drinker, particularly family members, experience as the result of alcohol abuse and addiction.<sup>146</sup> Empirical evidence of a direct correlation between alcohol consumption and child abuse is “neither very strong nor entirely unambiguous,” yet some recent empirical research lends support to an association between alcohol abuse and child abuse.<sup>147</sup> It appears that alcohol abuse and addiction have a greater negative impact on children in Alaska than in Finland, though numerous other factors, particularly poverty and access to health care, likely affect the high rates of child abuse and neglect in Alaska.

There are striking differences between the child death rates for children under five years of age in Finland and the U.S., and Alaska’s child death rate is much higher than average for the U.S. Early in the twenty-first century, Finland had 4 deaths among children under five years of age for every 1,000 live births, whereas the U.S. had 7 deaths. Within the U.S., the death rate per 100,000 for children between one and four was 32, while Alaska’s rate was 45. Of ethnic groups, American Indians and Alaska Natives had the highest death rates for children in the U.S.<sup>148</sup>

In 2003, for children aged between one and fourteen years, Alaska’s death rate was the highest in the nation at 38, compared to the U.S. rate of 21 per 100,000. Because Alaska’s population is so small—about 150,000 children in this age group—five-year averages are more meaningful, as they reduce the yearly fluctuations caused by just a few changes in numbers. Alaska’s average child death rate was 33 per 100,000 children between the ages of one and seventeen during the years 2000–2004. Some regions’ rates are exceedingly high. For instance the southwest region’s five year rate was 79.6 per 100,000 children. Causes of death were as follows: natural causes 29.5 percent; accidents 43.6 percent; suicides 15.9 percent (25 percent among 10–17 year olds); homicides 7.4 percent; other 3.6 percent.<sup>149</sup>

Alaska's teen death rate in 2004 was the highest in the nation at 105 per 100,000 teens 15–19 years of age, which was 60 percent above the national rate of 66. As noted above, suicide is especially high among Alaska's teenagers, and in some regions the incidence is staggeringly high. Alaska Native children are far more likely to die from suicide, homicide, or accidents than non-Natives. Hospitalizations for unintentional injuries are much higher among Alaska Native than other children, as well. In the late 1990s hospitalization rates for unintentional injury were 2.3 times higher for Alaska Native children than for white children.<sup>150</sup> Table 4 shows rates of death for Alaska's children aged nineteen and under from accidents, suicide, and homicide.

Table 4: Rates of death for Alaska children 19 and under per 100,000 children from accidents, suicide, and homicide, 1981–2000

Race	Accidents	Suicide	Homicide
Native	59.8	23	8.4
Non-Native	28	5.3	3.3

Source: Table created by author from information in *Kids Count Alaska 2005*.

Of the 32 teenagers who committed suicide between September 2003 and October 2004, 45 percent tested positive for alcohol or other drugs.<sup>151</sup>

Other indicators of child welfare are more difficult to compare cross-nationally, because cultural norms differ and because procedures for reporting abuse and neglect and for taking action differ markedly among countries. Nevertheless, it is clear that alcohol abuse has significant deleterious effects on child welfare in both Finland and Alaska. Salomaa found that between 1980 and 1990, when total consumption of alcohol increased in Finland by 27 percent for the decade, child protection costs grew by more than 8 percent *annually*.<sup>152</sup> Between 1990 and 2004, the number of children taken into protective custody increased by one-third in Finland. During the early 1990s the increase was apparently related to economic recession. Since 2000 it appears to relate to alcohol consumption.<sup>153</sup>

Alaska's child abuse rate at 16 per 1,000 children (2005) is one-third higher than the national rate of 12 per 1,000 (2004). Victims of child abuse are disproportionately Alaska Natives. About 25 percent of Alaska's children ages eighteen and under are Alaska Native, whereas 52 percent of the victims of child abuse and neglect in 2005 were Alaska Native.<sup>154</sup> Alaska's Council on Domestic Violence & Sexual Assault reports that Alaska's child sexual abuse rate is six times higher than the national rate.<sup>155</sup> Alcohol is known to be a factor in the overwhelming majority of crimes in rural Alaska, including sexual abuse of children.<sup>156</sup>

While the harmful effects of alcohol abuse in Finland and Alaska are difficult to measure precisely, the evidence is strong that relatively high consumption levels combined with binge or explosive drinking styles result in disproportionately high mortality, violence, and other social and economic costs. Finland's mortality, especially alcohol poisonings, male suicides, and homicides are most striking, particularly in the Nordic context. Alaska's alcohol mortality, Alaska Native male suicides, drownings, and harm to children are most striking, particularly in the American context.

### **Conclusion**

The public health consequences and social implications of Finland's liberalized national alcohol policy are significant. Per capita alcohol consumption has more than doubled in Finland since 1969, and Finland's alcohol-related harm has risen dramatically, with alcohol-related deaths having risen nearly four fold.<sup>157</sup> While EU membership in 1995 clearly provided the most immediate impetus for the recent radical changes in Finland's alcohol policies, a shift in public opinion reflecting rejection of long-accepted state paternalism and a yearning for increased individual freedom and responsibility preceded EU integration. This increased desire for freedom and individual autonomy will limit Finland's options in preventing alcohol abuse and related harm in the future, independent of EU imperatives.

Alaska's alcohol mortality and alcohol-related pathologies affect its indigenous population disproportionately, but non-Natives, too, tend to subscribe to what is sometimes called Alaska's frontier drinking style and suffer harms at higher rates than the national average. In rural Alaska and among Alaska Natives alcohol-abuse-related harms are alarmingly high and the effects on Native villages are overwhelming, as reported widely in the media. The Local Option has reduced injuries and deaths, though abuse and its consequences remain high.

Despite their unique histories, demographics, political cultures, and political contexts, both Finland and Alaska exhibit a range of deleterious effects of their binge drinking cultures. Each society wrestles with striking a balance between individual choices or liberty, and community or statewide regulations that aim to achieve order by reducing the harms that result from individual poor choices. Given the differences in their historical and present contexts, their policy options differ. Regardless of the choices they make to attempt to reduce alcohol abuse, results will not come easily or quickly, as is evidenced by Finland's efforts to change its norm of binge drinking and Alaska's limited success with the Local Option.

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## Notes

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3. Simpura, Karlsson and Leppänen, 109.
4. See Dennis Kelso and William DuBay, "Alaskan Natives and Alcohol: A Sociocultural and Epidemiological Review," in *Alcohol Use Among U.S. Ethnic Minorities: Proceedings of a Conference on the Epidemiology of Alcohol Use and Abuse Among Ethnic Minority Groups*; Research Monograph No. 18, 223–238 (Rockville, MD: U.S. Department of Health and Human Services, 1985), for a review of various approaches to understanding high rates of alcohol addiction and abuse among Native Americans, including psychological, social, cultural, and environmental explanations.
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7. See Robin Room, "Responses to Alcohol-Related Problems in an International Perspective: Characterizing and Explaining Cultural Wetness and Dryness" (paper presented at La ricerca Italiana sulle bevande alcoliche nel confronto internazionale, an international conference in Santa Stefano Belbo, Italy, September 1989) for a useful synthesis of the literature on wet versus dry cultures.
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11. Pertti Alasuutari, *Desire and Craving: A Cultural Theory of Alcoholism* (Albany: State University of New York Press, 1992), 10–11.
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15. Karlsson and Österberg, 144.
16. Martti Lehti, "The Homicide Wave in Finland from 1905 to 1932," in *Homicide in Finland. Trends and Patterns in Historical and Comparative Perspective*, ed. Lappi-Seppälä, Tapio, National Research Institute of Legal Policy Publication 181 (Helsinki: National Research Institute of Legal Policy, 2001), 89–90.
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18. Harold Holder, et al., *European Integration and Nordic Alcohol Policies: Changes in alcohol controls and consequences in Finland, Norway and Sweden, 1980-1997*, (Brookfield, VT: Ashgate Publishing Company, 1998), 167.
19. Tuomo Väliaho, "History: Prohibition turned Helsinki into a wet city: Prohibition repealed 70 years ago," *Helsingin Sanomat International Edition*, 9 April 2002, available from <http://www2helsinginsanomat.fi/english/archive/news.asp/id=10010409IE18>, Internet.
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21. Lehti, 83–85. Homicide rates rose throughout the Russian Empire in 1905 and thereafter.
22. Lehti, 86–88.
23. Lehti, 81. Sturla Nordlund, senior alcohol researcher at SIRUS, the Norwegian Institute for Alcohol and Drug Research, opines that the Nordic drinking culture is "not very far from the Russian drinking culture." (Nordlund, 65).
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25. Karlsson and Österberg, 144–145. EU integration in 1995 narrowed Alko's scope.
26. Karlsson and Österberg, 155.
27. Holder, et al., 1.
28. Börje Olsson, Hildigunnur Olafsdottir and Robin Room, "Introduction: Nordic traditions of studying the impact of alcohol policies," *The Effects of Nordic Alcohol Policies: What Happens to Drinking and Harm When Alcohol Controls Change?* ed. Robin Room (Helsinki: Nordic Council for Alcohol and Drug Research, 2002), 5.
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31. Mäkälä, Rossow and Tryggvesson, 24.
32. Mäkälä, Rossow and Tryggvesson, 52.
33. Sturla Nordlund, "The Relationship between the Total Consumption of Alcohol and Harmful Effects," in *Alcohol Polic –Epidemiology –Primary Health Care*, ed. Knut Gorfoss and Julia Ferkis, (Oslo: Sirius Skrifter No. 1/2002), 63.

34. Mäkälä, Rossow and Tryggvesson, 61.
35. Holder, et al., 128.
36. Håkan Leifman, "Trends in population drinking," in *Alcohol in Postwar Europe: Consumption drinking patterns, consequences and policy responses in 15 European countries*, ed. Thor Norström (Stockholm: Almqvist & Wiksell International, 2002), 75.
37. Simppura, Karlsson and Leppänen, 104.
38. Holder, et al., 129.
39. Thomas Karlsson and Christoffer Tigerstedt, "Testing new models in Finnish, Norwegian and Swedish alcohol policies," *Nordic Studies on Alcohol and Drugs* (NAT English Supplement) 21 (2004), 82.
40. Österberg and Karlsson, 23–26. Norway maintained its production monopoly on spirits. The European Court of Justice ruled in 1997 in the Franzén case that Sweden (and others) were allowed to keep their retail monopolies. (Ugland 2002, 128–130 in Karlsson and Tigerstedt).
41. Holder, et al., 4.
42. Karlsson and Tigerstedt, 85–86.
43. Karlsson and Tigerstedt, 82–83.
44. Jukka Törrönen and Thomas Karlsson, "Moral regulation of public space in the media and legislation in Finland," (paper presented at the 30<sup>th</sup> Annual Symposium on the Epidemiology of Alcohol of the Kettil Bruun Society, May 31–June 4, 2004, Helsinki), 4. The authors studied all alcohol-related editorials in six Finnish newspapers, for a total of 280 editorials.
45. Törrönen and Karlsson, 2.
46. Törrönen and Karlsson, 5.
47. Törrönen and Karlsson, 14–15.
48. Österberg, 1.
49. The trip from Helsinki to Tallin, the capitals of Finland and Estonia, takes two to four hours, depending on the speed of the boat.
50. Österberg, Esa, "The Impact of the Major Tax Reduction of Finnish Alcoholic Beverages 1<sup>st</sup> March 2004," paper presented at the 30<sup>th</sup> Annual Alcohol Epidemiology Symposium of the Kettil Bruun Society for Social and Epidemiological Research on Alcohol, Helsinki, Finland, May 31–June 4, 2004, 1-2. Prices dropped by an average of 36 percent on vodka and 28 percent on other distilled spirits, 25 percent on fortified wines, 3 percent on table wines, and 13 percent on strong beer. Prices on medium beer sold in grocery stores were expected to decline by 15 percent.
51. The week prior sales had been down by 9 percent, clearly in anticipation of the price drop.
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53. Österberg, 3–4.
54. Kerstin Stenius, "Kontrollens utrymme," ("A Place for Control") *Nordisk alcohol & narkotikatidskrift*, 21 (2004), 89.
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65. Fortune, 294–295.
66. Conn, 9–11.
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68. Andersen, 78–80.
69. Conn, 4.
70. Kelso and DuBay, 225.
71. Fortune, 1992, 181.
72. Fortune, 189.
73. Fortune, 192.
74. See Robin Room, Responses to Alcohol-Related Problems, *supra* note 7.
75. Conn, 17.
76. Conn, 24.
77. Conn, 26–28.
78. Kelso and DuBay, 225.
79. Conn, 29.
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81. Conn, 81.
82. Conn, 73–75.
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86. Peterson, 6.
87. Peterson, 1975, 12–13.
88. Peterson, 1975, 15.
89. Peterson, 1975, Table 54 (no page number).
90. Peterson, 1975, 18.
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95. Berman and Hull, 1–2.
96. Edwards and Lonner, i.
97. Edwards and Lonner, 14.
98. Edwards and Lonner, 4–6.
99. Edwards and Lonner, 23–24
100. The terms wet, damp and dry in the context of Alaska's Local Option are not to be confused with wet and dry alcohol culture terminology used by sociologists and other alcohol researchers to compare cultures worldwide.
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