Boots in the snow: Vilhjalmur Stefansson and the expansive defense of Arctic America

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Abstract

This article is dedicated to the role played by Arctic explorer and writer Vilhjalmur Stefansson (1879-1962), before and during World War II in the United States. Hired as a military advisor when the U.S. Army senior officers expected a Japanese invasion of Alaska, he set the agenda of strategic planning in a geographic environment often discarded. Focusing on the author's public writings in journals, magazines and books, as well as private correspondence with several actors of the national defense, this article also discusses the consequences of Stefansson's portrayal of the Arctic. From his attempts to convince the American society it had the required skillset to settle the Arctic in the 1920s, the appointed advisor mobilized his technical polar knowledge to eventually pioneer American militarization of the Arctic.

Keywords

Stefansson, Arctic, polar aviation, military training, World War II

"There is considerable confusion in the minds of the American people as to just what area of land and water they may be called upon to defend". Vilhjalmur Stefansson, ("What is the Western Hemisphere?", Foreign Affairs, 1941)

Introduction

In his *Future History of the Arctic* originally published in 2010, historian Charles Emmerson opposed two major figures in order to illustrate the shifting image of the Arctic in the late 19th and early 20th centuries. Both contested how the region had been traditionally considered as a margin of the civilized world, and

advocated for it to become a place of human development and progress. To Norwegian explorer and Nobel Peace prize winner Fridjof Nansen (1861-1930), the exploratory conquest of nature was the future of humankind. With ambivalence, Nansen embraced both scientific breakthroughs and the poetic myths of rejuvenation associated to higher latitudes. On the other hand, Vilhjalmur Stefansson (1879-1962) exploded the heroic explorer figure, and led a charge against common beliefs sustaining either Arctic romanticism or northern terrors. The main obstacle for visionary leadership from North Americans, he believed, was one of perception (Emmerson, 2010, p.9-23). As one of the last polar explorers of the era of dogsleds and telegrams, before their replacement by airplanes and radios, he believed northern lands should be settled and economically developed, transforming the Arctic ocean into a strategic "new Mediterranean", and thus potentially subjecting it to war.

Born on November 3, 1879 among an immigrant family in an Icelandic community on the Canadian frontier (Vanderhill and Christensen, 1963) and under an Americanized name, William Stephenson experienced both the harshness of the pioneering endeavors in the Prairies, and the prejudices against the Natives (Stefansson, 1964, p.12). As extreme climatic conditions pushed the Stefanssons to emigrate to more lenient southern lands, in North Dakota, where William automatically received the American citizenship in 1887 along with his father, and thus abandoned his condition of British subject (Levere, 1988; Cavell and Noakes, 2009). Inspired by the Norse sagas, his mother's tales and cooking he saw as proofs of human adaptability to northern lands, and Christianity he interpreted as the first large northward cultural dynamic, Stephenson traded his theological interest for anthropology. Using his scholarship for the Harvard Divinity School to join the Anthropology Department in 1903, he renamed himself Vilhjalmur Stefansson after his summer field trips to Iceland in 1904 and 1905. Joining the Anglo-American expedition of 1906-1907, then an ethnological survey from the Colville River, Alaska, to Victoria Island, Canada, between 1908 and 1912, before leading his own party to the Arctic Archipelago in 1913-1918, he gained considerable renown. A skillful apprentice to the Indigenous, he managed to live off the land and the sea ice for five continuous years, setting a record in the matter, and gained enough knowledge to become a prolific writer, as well as an expert of Arctic survival. Although a hero to several official figures in Ottawa to whom he gave both scientific and cartographic data -charting some of the last unknown islands

on Earth¹– and a self-proclaimed loyal subject to the Crown, Stefansson faced considerable controversies in his birth country due to crew members fatalities, and eventually settled in New York in 1918. After all, even though he had been charting lands for the Canadian government, the explorer would not have been able to set his expeditions without American sponsors: mainly the National Geographic Society of Washington and the Museum of Natural History of New York (Diubaldo, 1999). Even though Stefansson's fame truly started in Canadian lands, his integration to the United States' society was total, as well as his depiction of the Arctic he portrayed as a new frontier where willing citizens could revitalize their pioneer spirit².

From an American perspective, Stefansson incarnated the features of many explorers of the second half of the 19th century who previously made newspapers' headlines as national heroes for their scientific audacity or survival capabilities. Although all explorers were unique, some of Stefansson's traits resonated in echo of his predecessors': Elisha Kane's multidisciplinary approach, Charles Hall's theorization of human adaptation to the extreme coldness brought to the curious middle-class, or even Robert Peary's patriotism and controversial figure (Robinson, 2010). The popularity granted to Stefansson after his return from his second and third expeditions by the public even brought to some American commentators a new look upon the explorers as a social group, that have notably been seen as selfobsessed glory-seekers whose lies eventually polluted the press with false claims and debates (Riffenburgh, 1993). As the newspaper New York Sun expressed in 1912: "We shall pay the highest compliment we know to Stefansson by excluding him from the ranks of Arctic explorers altogether" (Robinson, 2010, p.13). In American exploratory circles, Stefansson was lauded and decorated as a champion, especially in the Explorers Club of

¹ By spring 1916, Stefansson had charted Brock Island and Borden Island he claimed "in the name of King George V on behalf of the Dominion of Canada", which brought to the Canadian government a map and a valid claim (further aerial inspection showed in 1947 that Borden Island was in fact composed of two islands, one of then renamed Mackenzie Island). Still in 1916, his party found two additional islands: Meighen Island and Lougheed Island, and found remains and artifacts of the British McClure expedition of 1853 (McCoy, 2012, p.219).

² As Stefansson explicitly mentioned in *The Northward Course of Empire*, many Americans were ready and able to settle in the Arctic without even knowing it, as they were potentially experiencing a harsher climate in southern lands: "*I lived for fifteen years in Pembina County at the northeast of North Dakota, and as a small boy I used to go two and a half miles to a country school at a temperature as low as I have ever seen it in my journeys along the coastline or over the moving sea ice in the polar regions. All other little boys and girls did likewise and none of us realized that we were heroes doing it" (Stefansson, 1922b, p.26).*

New York which elected him president (Henighan, 2009). Furthermore, the explorer also embraced another legacy of these men of the pole: their capacity to popularize their discoveries and adventure to large audiences, if not to the laymen. In parallel to the press, public lectures were subject to great interest from the American society. In this matter, Stefansson revealed himself to be a talented orator during his tours organized by the Chautauqua Circuit, giving lectures at Harvard, Stanford, Yale, Princeton and Vassar, among other universities of the Anglo-Saxon world (Pálsson, 2005, p.181). Although humble in his writing, Stefansson also knew how to shockingly introduce what he called the Arctic's "friendliness", along with new facts and perspectives of development that would offset dominant thoughts he sometimes even shared beforehand, out of ignorance he admitted³. Through his first major writings, My life with the Eskimo (1913), The Friendly Arctic (1921), The Northward Course of Empire (1922), the author kindled a new American interest for Arctic exploration and economic development, especially at a time when a raging World War and southern matters totally outweighed any northward political dynamic from Washington. The idea of a threat to the United States' territory coming from northern latitudes was out of consideration by state authorities who only conceded to minimal preparation efforts (Borneman, 2003; Perras, 2003; Jones, 2006). Among the military and civilian figures who had planned the militarization of the Alaskan peninsula and foretold an American intervention to Greenland, stood Stefansson.

This article argues that the understudied work of Stefansson, thinker and advisor of several defense initiatives, is essential to a fuller understanding of the preparation of the American society to wage a global war in high latitudes, both in the Atlantic and Pacific oceans where the United States's security would be challenged. A history of Stefansson's efforts to share his expertise with both officials through confidential cooperation, and the general audience through takes in magazines and journals, is also a history of the United States' early consideration of its own role as a future Arctic power.

³ In an interview he gave in 1957, Stefansson expressed: "You said that you've finished polar exploring formerly in 1918. Non, why did you never go back, Dr. Stefansson? Well, it seemed to me that I wanted to try to dispel from the world, the same misconceptions which I had of the Arctic when I went North, I used to think that I was well informed about the Arctic when I went North, but I concluded eventually that out of ten things that I believed about the Arctic before I went North, six were wrong. I was about sixty percent either partly or wholly wrong and during my first year in the Arctic I kept a careful diary and I am now in disagreement with over half of what I wrote in my own diary: things that I thought I had seen, and the meanings that I deduced" (Rare footage of Vilhjalmur Stefansson the Arctic explorer (1957), 2018).

"I think I should do it": in his intense correspondence with the War Department, Stefansson considers a world war spilling over the Arctic, and reveals the American delay in winter warfare

In 1921, The Friendly Arctic marked a revolution in both the perception of the Arctic and the literary process of depicting it. Even to the southerner who was envisioning of settling in the polar region, the Arctic was looking friendlier as Stefansson removed all the limits affiliated to cold, food, and supplies, thanks to the many techniques he depicted: building snow-houses, hunting the seals or tracking the caribou, using blubber as fuel, preventing oneself from scurvy and disease with an appropriate diet of meat and fat, etc.⁴. Theoretically, the attentive reader could extract from the book's 800 pages a pragmatic Arctic manual, comparable to an adventurer's guide. Nevertheless, its form could still be perfected and its content modernized, especially due to the emergent prevalence of airplanes. This theme fitted well in his already existing writing. Throughout the 1920s, Stefansson meticulously debunked the Arctic's image while demonstrating why and how the region was already struck by modernity. To him, the High North was not a place of romantic and literary adventures, but of science and ice-capable submarines (Stefansson, 1913, 1922a). The Inuit were no noble or dangerous savages but fellow human beings who ingenuously adapted their way of life to their environment (Stefansson, 1913). In The Northward Course of Empire, published in 1922, he even argued that the Arctic would become the seat of a new world power, and depicted how extensive Arctic resources' potential was. He also started to illustrate how aviation would revolutionize the importance of the Arctic: "Since the days of Magellan, it has been commonplace that you can go east by sailing west. It is about to become an equal commonplace that you can go east by flying north" (Stefansson, 1922b, p.170). This point would be even more consolidated through following articles that envisioned a sub-polar region covered where airplanes would connect the northern hemisphere altogether - due to the spherical shape of the Earth (Stefansson, 1924, 1928). Prophesying air power was not effortless in a country deprived of a true air force until World War I: in 1914,

⁴ Admiral Robert Peary himself praised his colleague's revolutionary methods when the latter was awarded the Hubbard Gold Medal: "Stefansson has evolved a way to make himself absolutely self-sustaining. He could have lived in the Arctic fifteen and one-half years just as easily as five and one-half years. By combining great natural, physical, and mental ability he has made an absolute record" (Hobbs, 1923).

the United States only had 49 aircraft, while France, Germany and Russia already had 1,400, 1,000 and 800 warplanes (Van Vleck, 2013, p.27).

In 1930, one of Stefansson's most trusted Canadian friends, Alfred J. Lomen, encouraged him to focus on a more technical and convenient publication, as he stated in his letter: "Our experience has brought forcibly to our attention the fact that there is at this time a great need for a manual that can be used by fliers and travelers in the Arctic and the Antarctic, one that will contain instructions on the following subjects: living on the ice and on the land, finding one's way, caring for one's self, building shelters, procuring game, wearing Arctic clothing and caring for same, et cetera. From now on there will be more and more flying in the extreme north and south, and this text would serve as a "bible" for the pioneers" (Stefansson, 1944b).

Through his own experience in the Arctic, his acquaintance with prominent air figures like Orville Wright he met at Dayton, Ohio, in spring 1919 (Dukes, 2018), and his imposing 7,000 document-strong library already managed by a secretary (Stefansson, 1935c), Stefansson had extended his expertise on air travel, and was recognized as such. Hired in 1930 by the Transamerican Airlines company, he started devising an air route that would link the United States to Denmark through several new stations to be opened in the North Atlantic: in Labrador, West Greenland, East Greenland, Iceland, the Faroe Islands and the Shetland Islands. In 1931, he successfully secured landing rights in Iceland for the company before witnessing it being acquired by Pan American Airways in 1932. The advisor's services were transferred as well to this new company which (Stefansson, 1964, p.309), although only established in 1927, was already powerful and influential, as it had been cofounded by Air Corps officers (Daley, 1980, p.27) and became the United States' exclusive international airlines until 1945 (Van Vleck, 2013, p.6). From his association with such a national asset, Stefansson started exchanging with the War Department.

Such an evolution in the former explorer's career does not transpire much from his autobiography, in which he used great discretion when addressing the matter of his cooperation with the United States' military in the 1930s: "The library now had a staff of ten, with a steadily growing reference section for that region around the North Pole which has for a boundary the southern edge of permafrost on land and the farthest limit of drifting ice at sea. We had undertaken to counsel the Army, the Navy, and corporations like Pan American Airways on the climate, nature, and resources, as well as on the politics and cultural history, of a third of the Northern Hemisphere. Our territory covered Iceland, the northern halves of Norway and Sweden, all of Finland, the northern third of the Soviet Union, and the northern Pacific Ocean, including the Sea of Okhotsk and the Kurile Islands. East of this, our field included the Aleutians, all of Alaska, Manitoba, and all the lands in North America north of the transcontinental railways of Canada. On our eastern coast we went as far south as the Gulf of St. Lawrence and Newfoundland. We covered all of Greenland, and were not unaware that ice has been observed at sea abreast of Palm Beach" (Stefansson, 1964, p.336).

Left vague in his public writing, the mentioned counseling activities informally began in 1934 and officially started in 1935 (Stefansson, 1935c). They constituted a turning point for Stefansson's career as he was aware that these new opportunities would grant him access to decisional circles, a kind of environment he used to thrive in when he was still welcomed in Ottawa's government offices (Dukes, 2018). Hence, he set aside other projects he had, like his editing contract with the Argonaut Press on 16th century British explorer Martin Frobisher, pushing the date of publication Fall 1935 to 1938. Stefansson explained in his letter dated May 13, 1935: "I have been very busy and besides I fear I did not realize the passage of time. Then came a request from the United States Government for the compiling of certain information and while it is not quite a command I feel I should do it" (Stefansson, 1935b, 1936). Comprehensively corresponding with senior officers, Stefansson spent considerable efforts in meetings and letters to represent the need of Arctic data in case of an attack perpetrated on the Pacific coast. His favorite and most recurrent correspondent was General Oscar Westover (1883-1938), Assistant Chief of the Army Air Corps and thus the most interested in the consultant's work. Furthermore, Westover was one of the rare officers in Washington with personal experience in Alaska, where he had been stationed as 1st Lieutenant at Fort Gibbon. However it was General George Emerson Leach (1876-1955), Chief of the National Guard Bureau since 1931, who informed Stefansson by telegram on February 18, 1935, that President Roosevelt had authorized the explorer's idea of a report specifically dedicated to operating troops in cold and Arctic regions. This project had been priorly discussed between three characters: General Leach himself, Secretary of War George Dern (1933-1936) who motorized the Army and greatly invested resources to public works, and General Aloysius Drum (1879-1951), deputy to the Army's Chief of Staff in 1933 and then commander of the Hawaiian Department in 1935 (Stefansson, 1935c) - who acted as the most virulent opponent to General William Mitchell (1879-1936), promoter of an audacious air doctrine and a U.S. Air Force that would be independent from the U.S. Army (Miller, 2009, p.39). Describing the heated debates among the War Department about the publishing of this kind of document, Leach qualified them as a "long drawn out fight" (Stefansson, 1935c).

Indeed, by 1935, the military had suffered from both the 1929 economic crisis and the Presidency's focus on peace in the Pacific and prevention of arms escalation, at the expense of troops and equipment mobilization. So far, the U.S. Army had not released any non-confidential guide about cold weather tactics and survival, nor any report on the general subject of flying over, or near, Alaska. Only the Navy had published an outlet on the latter in 1934 (Stefansson, 1935c). The situation was even more concerning that other nations had included preparedness to cold weather into their strategies. The Soviet Army had seized the subject, and its founder, Leon Trotsky, was sent a copy of The Northward Course of Empire in August 1924 by Stefansson's lover, writer Fannie Hurst, during her three-week trip to Soviet Russia (Pálsson, 2005, p.196). Even smaller states had embraced the cold in their warfare literature, such as Finland with its Tahrisotakasikirja ("Winter War Handbook") published in 1928, which was based on field tests and experiments conducted over the previous 20 years⁵ (Tuunainen, 2016). Hence, in the United States, Stefansson's enterprise and its financing were certainly considered as spearheading, and necessitated institutional backing. Accordingly, sufficient funding would not have been possible without the bill introduced by Democrat Representative Ross Alexander Collins (1880-1968), who was chairman of the House Subcommittee for War Department Appropriations, and was waging a bureaucratic crusade for the modernization of the Army and mechanization of weaponry (Collins, 1941). The first copy of Stefansson's manuscript was to be autographed to Collins. Stefansson did not waste any time and wrote on the March 5, 1935 to General Simonds (1874-1938), deputy Chief of Staff, about the necessity to initiate a survey over Alaska on the next summer for the sake of his research:

"Time being the essence of the matter, I call to your attention immediately a situation where I know my research is going to be nearly helpless. In case of an operation against an Asiatic power where we have, either for allies or opponents, countries situated on the Eurasian side of the polar Mediterranean, and perhaps in other cases, it would be important to know under just what conditions aircraft could pass the Brooks Range which separates the vast triangular plain of northern Alaska from the Yukon Basin. There are no half-satisfactory maps in existence by which aviators could navigate from Yukon River points to such places as Icy Cape,

⁵ During the Winter War, between November 30, 1939 and March 13, 1940 – in which the Finns used geographical mastery, ski troops, scorched earth tactics and effective camping conditions, while the adversary suffered from frostbites – for one Finnish soldier killed, six Soviet soldiers had perished (Tuunainen, 2016).

Wainwright, barrow, or the Colville mouth. We don't have even passably adequate information of the maximum height of peaks, the location of passes, etc."

Proposing a joint effort between the Geological Survey and the Chief of the Alaska Division, Stefansson addressed a letter the following day to General MacArthur (1880-1964), who, as Chief of Staff, also played a decisive role in the publication of the proposed report. Referring to his previous works, Stefansson introduced to his correspondent one of his core ideas, which implied to look at the world map not from an East-West axis, but from a polar view: "For I have been considering through many years the polar Mediterranean and its basin as a theatre of coming world activity both military and commercial" (Stefansson, 1935c).

Still on March 6, 1935, the consultant wrote back to Simonds, MacArthur's assistant, to suggest opening his report with an explicit reference to this polar centered view in order to clarify the counter-intuitive practicability of transportation in the Arctic: "The Polar Sea is a Mediterranean. By water it is navigable along tis margin. By air it is everywhere navigable, and crossable along every diameter. The ice which covers much of it can be used for emergency landings. Under certain conditions it may be practical and advisable to locate upon the floating sea ice semi-permanent base stations with reserve supplies, airplane (and possibly submarine) tenders, radio (including directional) etc. [...] The polar Mediterranean is nearly surrounded by a vast drainage basin of north-flowing rivers. Our study will deal with the Mediterranean and its basin from every point of view that has, so far as we can see, a bearing on human activities, especially those related to defense" (Stefansson, 1935b).

After meeting with the Secretary of War, the Chief of Staff and the Deputy Chief, in Washington D.C. where Stefansson had a private room put at his disposal by the Library of Congress, a first draft of the report was established. Precisely, three documents were planned: a large-size publication to be shared in limited copies within the War Department, a confidential file to which access would be extremely restricted, and a medium-size handbook for general distribution to all Army personnel ordered to Alaska or the Arctic for service. The contract was issued by the War department on April 3, 1935. Stefansson was to be paid \$10,000 – or

⁶ In this letter, Stefansson also started to recommend an infrastructure overall that could help with transportation: "Mainly, no doubt, the viewpoint would be aeronautical; but it might prove that tractor routes could also be laid down for heavy winter freighting. Under Arctic conditions it is frequently possible to map out long across lake ice, which is nearly equivalent to paving, while the portages between lakes are often surprisingly low and well suited for tractors during the winter when the bogs hav a concrete-like hardness".

\$200,000 in today's value – from the Materiel Division of the Air Corps located in Dayton, Ohio, for his service. However, despite having one of the most well-equipped Arctic libraries and a team of librarians, Stefansson needed to collect data and recommended to initiate field missions. Following his recommendation, Westover mobilized the Alaskan Division of the Geological Survey to undertake aerial photographs of the peninsula, before trying to establish an international partnership presented as vital for the national defense (Stefansson, 1935c). As Stefansson was very keen about the development of the Soviet Union, where his books were popular due to the cultural and political significance of the Arctic Ocean (McCannon, 1998; Emmerson, 2010, p.47), as well as his own leaning towards socialism (Srebrnik, 1998b, 1998a), he seized the opportunity to advocate scientific cooperation⁷. Unfortunately for Stefansson, he was informed that the matter had already been addressed in mid-May 1934. As stated by the Chief of the Weather Bureau, W. R. Gregg, from the Department of Agriculture, contacts had been made with Soviet meteorologist George Ushkakoff, who acted as a liaison with Moscow. A map of Asian meteorological centers had been drawn, displaying the fact that the majority of the most strategic weather stations were actually located in the Siberian Arctic, and sent to both the scientist and his supervisor in Moscow, but was left without reply. This dead-end did not prevent the writing of the strategic documents, although other hardships emerged. Three years after becoming Chief of the Air Corps in December 1935, Westover died in a plane crash on September 21, 1938, and was replaced by General Henry "Hap" Arnold (1886-1950) who had other views about for Stefansson's work. Instead of the original twomillion-word report to be condensed into a manual later on, the general wanted it to be a set of four exhaustive guides of one thousand to five thousand pages each for Alaska, Canada, Greenland and Siberia, with a portable Arctic manual as a by-product (Stefansson, 1935c).

All the reports prepared by the Arctic consultant for the War Department remained confidential and were not communicated to the public. Only the medium-size handbook for general distribution was released in 1940,

⁷ As Stefansson explained to Westover in his letter dated May 8, 1935: "Should there be an Alaskan operation against a power from the west, we would be at a disadvantage in weather forecasting since the weather which had just passed over them would be on its way to us, and they could sort of follow it if they desired. This makes the technical perfection of our weather prediction methods and appliances more urgent for us than for them. We should therefore, proceed without delay, and according to the advice of our best people, to the study of Alaskan weather on the ground. We should put into operation at once the necessary observation stations, equip them as required and put them in charge of really competent people" (Stefansson, 1935c).

anonymously, in two volumes. Totaling 536 pages, the manual proposed to its readership a historical overview as well as chapters on geography, climate, light, practical zoology and botany, as well as food and drink preparation, clothing and personal gear, health issues and accidents, hunting, fishing, travel and mechanized transport. It also had a short appendix on the building of snow camps. On April 1, 1942, the War Department published a considerably shorter version of 74 pages divided into 10 chapters with the subtitle *Technical Manual*. It skipped the deemed superfluous historical chapter in order to focus its content on more pragmatic concerns, but still followed the former manual's organization: from topography and natural sciences to survival tactics concerning insects, vegetation, food and drink, clothing and emergency situations. Although the publication is deprived of any information about its author(s), the name of Stefansson – and only his – appears on several occasions when examples of survival are given to complement an explanatory paragraph (Stefansson, 1942, p.91).

In this publication, many of Stefansson's earlier takes on aviation are included, along with his demonstration on the prevalence of fresh meat in an effective diet that would prevent scurvy. However, the most valuable element taught by the manual is the teaching of what the author called "polar craft", a mindset focused on adaptability to the wilderness. As a recall of the cover page of *The Friendly Arctic*, where a photo shows Stefansson dragging a seal on the sea ice, the marine animal also benefits from an important attention, encouraging the readers to familiarize themselves with the Arctic adventurer's best friend: "The seal furnishes food, clothing, heat, and light. The blubber of the animal is, if anything, even more important than the meat; for it furnishes heat and light as well as food" (Stefansson, 1942, p.43). By emphasizing the need of "living off the country", the publication strongly reconnected with *The Friendly Arctic* that already had illustrated itself as a practical travel guide. In the 74 pages of the *Technical Manual*, survival matters – food, cooking and "living off country" – take up to two-thirds of the publication.

Despite its destination to a military readership, explicit mentioning of conflict in northern landscapes remained rare, though still present in the sub-chapter dedicated to the natural advantages of Arctic lands, in the 1940-long-version, where it is asserted that "while an Arctic territory is perhaps more easily invaded than any other by a mechanized army of combined land and air forces, it is also nearly or quite the easiest terrain in the world to defend" (Stefansson, 1940, p.534). Moreover, the *Manual* surprisingly did not include any illustration, except for the snow-house building section which

displayed pictures, arranged in a way so that they could be used as a visual guide for the troops. However, the 1944 version, edited by the MacMillan Company as a slightly richer trade version of 556 pages including Vilhjalmur Stefansson's signature, did have an appendix showing the training in snow house building of troops at Camp Hale, Colorado, and "on the moving pack ice of the Arctic Mediterranean" (Stefansson, 1944a).

Being the product of both scholarly work and data synthesis, the Artic Manual also marked the beginning of an era of popularization of survival techniques, initiated by Stefansson. Regularly defending a low carbohydrate, high protein Arctic-like diet (Stefansson, 1920, 1935a; Stefansson et al., 1927), he was once again the thinker of a new, impactful dynamic, when his survival publication was followed by educational films, produced by and for the military, and dedicated to specific issues like surviving an aircraft crash in cold and potentially hostile territory (Army Air Forces, 1943). However, beyond the lines of this new publication laid a new game-changing reality that divided the U.S. Army's organization. Indeed, by insisting on polar flights and how to survive in cold environments, Stefansson did not only shatter the traditionally perceived "unfriendliness" of the Arctic but also its remoteness. Hence, as new northern routes increasingly connected North America to Siberia and Europe through the Arctic, the risk of seeing the United States' security endangered equally increased. On this matter, Stefansson stood as an avant-garde by notifying the public that efficiently defending America would mean defending Arctic lands as well.

"The acquisition of Iceland and Greenland is necessary and it is not a new idea"⁸. Americanizing Iceland and Greenland, and extending the public's conception of the Western hemisphere

As his first task for the War Department was reaching its end, Stefansson resumed less confidential projects for the American public which was increasingly exposed to the outside world. Now that aviation techniques were mature enough and reduced distances between continents, with aviator

⁸ On December 3, 1940, *The New York Times* relayed Stefansson's open call to President Roosevelt that he gave in a press conference on his return from a two-year survey in Alaska. In addition of calling for a long-lasting alliance with the Soviet Union, he called for expansionism: "The acquisition of Iceland and Greenland is necessary and it is not a new idea. Secretary Seward advocated it at the time he negotiated for Alaska. Right now it is believed Iceland is occupied by 80,000 Canadian troops, so we have no worries on that score. But while Denmark is controlled by Germany it will be difficult to acquire Greenland" (*The New York Times*, 03/12/1940, p.19).

Charles Lindbergh (1902-1974) crossing the Atlantic Ocean in May 1927 before exploring the Canadian High North from the air (Buse, Brown and Martin, 2002), tourism by airplanes was becoming accessible to the middleclass. Bringing new consumer goods and influencing popular culture, aviation did not only bring American ideas to the rest of the world, but also raised the American society's curiosity to international matters (Van Vleck, 2013). Thus, New York's World Fair of 1939-1940 illustrated both the country's excitement for progressive breakthroughs from all around the world, and its denial of rising armed tensions in Europe and Asia (Rydell, 1990; Fortuna, 2019). Although not fully independent, Iceland was invited to participate in the fair, but the head organizer had implied that an entire building would not be allocated to Revkjavik. The Icelandic authorities contacted Stefansson asking him to intercede on their behalf. In gratitude for eventually securing its claims and preventing a cohabitation within the Danish building, the Icelandic government commissioned him to write a book that would be sold at the fair. Deciphering this incident as a lack of knowledge in regard to the North Atlantic and its strategic value, Stefansson gladly accepted (Stefansson, 1964, p.334-335).

The 274 page-long book was indeed published and titled: *Iceland: The First American Republic.* As expected from its eye-catching if not provocative title, the book displayed a scholarly intent to identify the ties between the two nations by proposing a broad and historical presentation of key topics about the Icelandic society over fourteen chapters: on Icelandic history, literature, education, health and medical services, agriculture and fisheries, commerce, communication, tourism and immigration. The preface was written by a friend of Stefansson's he had met in Greenwich Village where he also had frequented other aviation pioneers: Theodore Roosevelt Jr. (1887-1944) (Pálsson, 2005, p.187). A war hero, former Assistant Secretary of the Navy, and former Governor of Puerto Rico and the Philippines, "Ted" was convinced by Stefansson's arguments and increased the political aura of the publication by playing along in the comparison game⁹. If he did not express the idea of an American expansion

^{9 &}quot;But there is another side to Iceland as romantic as any Viking raid. It is the development of the nation as a modern democracy. Iceland, like its Scandinavian cousins, has gone far toward solving the great problems of democracy that are vexing the United States. In Iceland no one is very wealthy and by the same token no one is very poor. (...) The Icelanders believe as we do in the United States that every citizen must be educated properly and that no one should be allowed to tyrannize and impoverish his fellow citizen. They maintain that the state owes every man an opportunity to make a living. (...) The Icelandic democracy may be studied with profit by Americans today" (Stefansson, 1939, p.vii).

to Iceland, he nevertheless shared the idea that southern societies could learn from an Arctic people and enrich themselves thanks to that knowledge. Indeed, alongside their democratic values, the Icelanders' hard-working nature was also praised by the statesman, raising the question of how a better understanding of the Arctic could improve countries of the temperate zone at political and cultural level.

After the preface, Stefansson immediately connected his ancestral homeland to his own North American home(s): "It would seem high time that the United States and Canada discover the nation that discovered the mainland of North America". More importantly, he described Iceland as the starting point of the American continent's first discovery¹⁰, and used the compelling expression of "steppingstone between two worlds" (Stefansson, 1939a, p.1). The author went even farther by arguing that the island was actually closer to the United States than it is to Europe as it belonged to the same geological body – though the tectonic plaques would only be definitely adopted by geoscientists in the early 1960s. This striking image of a steppingstone resonates through the following chapters, especially the one on communications. Stefansson recognized both Iceland's position as a perch over North-Western Europe and its appropriate weather that would allow safe and continuous air travels from North America to the island. In echo of his previous articles dedicated to aviation, the author stated that the progress made by modern airplanes "renewed confidence that aviation will eventually utilize the strategic position of Iceland just as completely as if it were a tropical or sub-tropical island, like the Hawaiis or the Azores" (Stefansson, 1939a, p.205). To Stefansson, the island was to become an aviation capital, where Icelanders would turn into masters of air navigation, just like their ancestors mastered the seas. Those "highways of the future" were well known from the American military whose aviators landed in Iceland in 1924 during the first aerial circumnavigation of the world, after flying over Greenland's coasts (Thomas, 1925; Lane et al., 2002). Although not explicitly mentioned, the military interest of the telegraphic and radio connections between Iceland, Europe and the United States in the second half of the 1930s, made the island a decisive meteorological station for the northern hemisphere and Atlantic travels during World War II (Weigert, 1944). In prevision of a conflict, Stefansson was then asked from the State Department to determine "how it might secure good representatives in

^{10 &}quot;The discovery of Iceland was the discovery of America, or if you like, it was the discovery of the New World" (Stefansson, 1939a, p.15).

Iceland, a country that both democracies and the Nazis were courting". Fulfilling this new mission, he faced the bizarre argument that even American students without Nordic ancestry learning Old Norse (*i.e.* Icelandic) were not fit to serve due to their choice of studying such an obscure language, which could only show that they were biased (Stefansson, 1964, p.363). It was not the first time that Stefansson was disappointed by American state actors he advised, nor the last time.

In order to nudge development efforts in Alaska, Stefansson published a seventeen-page-long article dedicated to "The American Far North" in a 1939 issue of *Foreign Affairs*. The main themes revolved around food availability, good and bad weather conditions related to a potential Arctic air network, the Indigenous population of Alaska, and the peninsula's resources and train lines. All his statements were to be taken as comments on the voluntarily discarded potential of northern regions and reminders of the government's non-action: "So far the National Government has given comparatively little consistent support to Alaskan flying; but there are signs now that the importance of northern aviation is becoming better understood at Washington. For instance, on August 6, 1938, there took place the first flight of an experimental Seattle-Alaska service which is expected to lead to the opening of a regular mail and passenger air line. Hitherto there has been no scheduled aerial connection between Alaska and the rest of the United States" (Stefansson, 1939b).

As the objective of the article was to demonstrate that Westerners can live in the Arctic, and that "with government aid [the American Far North could produce] much food – cereals meat and fish – which could be marketed in the populated areas of the north temperate zone", its most striking element is Stefansson's definition of the "American far north", which includes Greenland. Praising how the Danish administration was keeping "17,000 eskimos alive and in good health"¹¹, he recalled the importance of the Ivitgut mine "operated for several decades by an American company", the cryolite of which, once turned into aluminum, would put "Greenland (...) in a position to play a unique role in the development of trans-Arctic flying". The article ended on a prophetic note: "Presumably, the other circumpolar countries will undertake extensive projects within their Arctic territories only if they become convinced that military necessities demand it" (Stefansson, 1939b). This incorporation of

¹¹ As Stefansson did not visit Greenland until his old days, it is likely that his good opinion of the Danish colonial organization is the product of his own observations on how the Indigenous were treated in Canada and in the U.S.

Arctic territories into the United States' sphere of influence grew stronger in the following years. In January 1941, Stefansson openly joined Greenland to North America in his article "What is the Western Hemisphere?", which started with the sentence: "There is considerable confusion in the minds of the American people as to just what area of land and water they may be called upon to defend". The piece published in Foreign Affairs echoed both the Monroe Doctrine opposing European presence in the Western Hemisphere and presented to Congress in 1823 (Sexton, 2011), and the National Guard and Reserve Officers Mobilization Act issued by President Roosevelt on August 27, 1940 stating that the concerned soldiers would not be mobilized beyond the Western Hemisphere's limits. Stretching existing geographical concepts, Stefansson concluded his argumentation with a pragmatic point: "This "middle-of-the-channel" line is not only rational from the standpoint of geography, but offers the United States the best 'rampart' behind which to defend this hemisphere, for it puts the maximum possible distance between us and any potential aggressors in Europe" (Stefansson, 1941b). Was Stefansson eventually following the steps of Admiral Peary who previously expressed his belief in Greenland as a "valuable piece of defensive armor", or as a "serious menace" if controlled by "hostile interests" (Berry, Bowles and Jones, 2016)?

In contrast to Iceland: The First American Republic, Stefansson's new book published in 1942, focused less on the cultural rapprochement of two societies, but rather on their historical meeting moments. Simply entitled Greenland, ten of the sixteen chapters are set in the pre-Columbian era. Chapters 15 and 16, however, are dedicated to Greenland's "administration and development" in the 1930s, and to the "strategic importance" of the island during the world conflict. In the latter, Stefansson reminded his readership that Secretary of State Seward had commissioned a report on Greenland's resources in order to legitimate a purchase, and commented: "One of Greenland's chief values is in the forecasting of weather, and that conception also was at best rather vague in the mind of Seward. Yet the fact appears to remain that [...] our conclusion is the same as his. We need Greenland for the domination of the North Atlantic. As said, part of our need for that domination is in our need to forecast the weather of the North Atlantic and of the countries immediately to the east. Thus, with Greenland to help us, we ought to be able to bomb Germany with foreknowledge; without Greenland to help her, Germany should be flying to Greenland by guesswork, or by foreknowledge less precise than ours. For it is true saying, if understood with its proper limitations, that "weather comes from the west"" (Stefansson, 1944b).

Although all American potential legal claims were abandoned on August 4, 1916 as part of the deal concerning the purchase of the Virgin Islands from Denmark (Weigert, 1944), academics and critics lauded Stefansson for his reconsideration of American influence in the North Atlantic (Mosely, 1940; Beck, 1943) and for "[grasping] firmly the entire vast and difficult subject, and [laying] it before us with skill, thoroughness and vitality" (Means, 1942). Of course, more than Stefansson's influence, it is air mindedness and war necessities that brought back in the United States the question of Arctic expansionism. However, it is important to keep in mind that the writer's narrative about the two strategic Arctic islands remains highly important by the light it shed upon the American public's perceptions of Iceland and Greenland. Raising public awareness was Stefansson's most loud-voiced activity during the war, but not the only one, as he was conducting less sonorous counseling in Alaska.

"You are the master. We are here to sit at your feet". Developing Alaska into America's "rampart", Stefansson as part of the efforts to palliate the Army's unpreparedness

As Japan had been antagonized by the influential American presence in the Pacific since the Portsmouth Treaty of September 1905 ending the Russo-Japanese war, and the Washington Naval Treaty of February 1922 imposing a restricting size-limit to Tokyo's fleet (Howard Jones, 2001, p.112), the United States' legislative and executive powers chose not to confront the rising Asian empire. Congress' obsession for budget-cuts in the 1920s had entailed a situation of unpreparedness in Alaska, despite General Mitchell's repeated calls for an Alaskan air power policy. His plead to a parliamentary committee in February 1934 motivated a revised version of the National Defense Act in August 1935, never to be adopted, though, due to the government's new anti-escalation policy in the Pacific (Perras, 2003, p.30; Kane, 2009). After inviting Japanese vessels to visit Alaska, proposing to demilitarize "that portion of Alaska nearest Japan" and to neutralize the Pacific, the President changed his approach in early 1938 by increasing the U.S. Navy budget, but Alaska military development was still considered too costly and of secondary concern. The risk was twofold: not only were Japanese attacks dreaded, but a Nazi victory over the Soviet Union could have turned Siberia into a stepping stone to America. "There is no gainsaying that Alaska will play a vital part in the scheme of national defense", prophesied the Chief of the Air Corps of the U.S. Army, former protégé of William Mitchell and co-founder of Pan American Airways, Major General Henry "Hap" Arnold in the October 1940 issue of *National Geographic Magazine*. To him, the fact that national defense would require "air bases up near the Arctic Circle" was evident, just like the difficulty of taking up such an engineering challenge (Borneman, 2003, p.332). It was on the subject of such lack of manpower, equipment (Perras, 2003, p.58), and political support that Stefansson had the opportunity to counsel once more the American military.

The survival expert's interest for Alaska's defense capacities was not new. Already in his correspondence of 1935 with the War Department, Stefansson advised General Westover in his letter dated December 26, to build resilience among the Alaskan population by promoting winter sports, which had not taken hold there unlike in Canada. If soldiers stationed in the peninsula were the first group he was referring to, he also encouraged the practice of snowshoeing and skiing among women, whom he considered to be less tolerant to cold because of poor clothing design and their traditional assignation to domestic tasks (Stefansson, 1935c). In his autobiography, Stefansson related how the publication of the Arctic Manual earned him an invitation in October 1940 to Fairbanks from the War Department, through Pan American Airways, which had mobilized him in Alaska for the two previous years, before becoming the largest transport contractor to the War Department and the only Navy contractor during World War II (Pan American World Airways, 1957; Stefansson, 1964, p.324). This time, the consultant's mission was to advise Brigadier General Simon Bolivar Buckner Jr. (1886-1945), the new head of the Alaska Defense Command since July 1940, who never had gone farther north than the military academy of West Point, New York. Most of his questions were focused on engineering in extreme cold, village planning, construction of houses, permanently frozen ground and fog (Stefansson, 1964, p.330). The global image that emanates from Stefansson's autobiography is one of an unprepared staff of high-level officers who eventually did not follow the former explorer's advices, except on one matter. In June 1942, Stefansson was called by Colonel Georges Doriot (1899-1987) so he could give a one-hour lecture about clothing and appropriate food. He was told by his host: "You are the master. We are here to sit at your feet. We want you to suggest any line of research you think we should follow, but especially we want your suggestions on food for the Army in its northern operations. Your least suggestion will be translated into

command" (Stefansson, 1964, p.338). According to Stefansson this talk was the most important one he gave during World War II. And yet, his assertion must be confronted with his participation in two crucial projects hardly mentioned at all in his autobiography.

On December 3, 1940, Stefansson gave a press conference about his survey in Alaska, in which he outspokenly criticized the defense program's progress by pointing the lack of coordination between the agencies. Nevertheless, he still congratulated the way that barracks, hangars and airfields were constructed "faster than any one had expected": "Alaskan defense is vital to the national program. The odds are ten to one against our Pacific fleet being defeated. But we must prepare against the single chance and go ahead with the reconstruction plan for the three major overland highways linking Alaska and the United States, to insure continuous communication with Alaska in any emergency" (The New York Times, 03/12/1940, p.19). Almost eight months after the conference – in which he had called for the acquisition of Greenland - Stefansson published a new article, "Routes to Alaska", where he described the peninsula as "the northern anchor of America's ramparts in the Pacific", "destined to play a stellar strategic role in the defense of this hemisphere". The ten-page long article proposed an assessment of the connections between the peninsula and North America, with propositions to remedy to Alaskan isolation in case of open conflict, which could have dire consequences: "In the event of an American naval defeat in the Pacific, commerce between Alaska and the States would be severed and Alaskans would become prisoners within Alaska, except those who could fly out". Thus, the author encouraged the construction of modern sea, air and land transport infrastructures (Stefansson, 1941a).

To secure Alaska's defense, and support the Soviet Union's war efforts, mobility was the key¹². With only one major highway between Fairbanks and Valdez, a limited shipping service and some Pan American Airways flights, Alaska was almost cut off from the rest of the United States, especially Washington D.C.'s decisional circles. Even though two

¹² When the Lend-Lease Program started on October 30, 1941 and organized the loan of war material to the Soviet Union, aerial supply convoys went through Alaska, and made the lack of infrastructures blatant. In January 1942, of the thirty-eight airplanes that took off in Fairbanks, twenty-seven of them crashed on route, due to inexperience, harsh weather and large distances between the airfields (Borneman, 2003, p.336). In total, 47% of the material sent to the Soviet Union went through the North Pacific (Dolitsky et al., 2016).

International Highway Association had been established in 1929 at Fairbanks, Alaska, and Dawson, Yukon Territory, in order to connect the American peninsula to the other states of the Union, nothing had been concretely achieved before 1938, when Congress approved the creation of the International Highway Commission (Borneman, 2003, p.335). In his article, Stefansson also mentioned the audacious project supposed to provide logistical support to the region's infrastructures: the Alaska Highway. However, he eluded the divisions existing between the United States, Canada and the U.S. Army Corps of Engineers favoring different paths, closer to the coast or further inland (Coates and Morrison, 2015), while Stefansson indicated a farther inland route he considered more convenient as it went through the Prairies and passed by both Alberta's tar sands and Fort Norman's oil wells (Stefansson, 1941a). Canadian authorities reluctantly agreed to the project on the condition that all the construction, cost and maintenance would be undertaken by their American counterparts until the end of the war, when the Canadian portion of the infrastructure would be transferred to Ottawa. Officially validated on February 6, 1942, and completed on October 28, 1942, the highway counted 2,700km with a workforce of 10,000, linking Dawson Creek, British Columbia, to Delta Junction, Alaska (Grant, 1989, p.76). During the consultation process, even small towns only counting a few hundred souls sent representatives in order to advocate another highway linking Alberta to Chicago, hoping that the extended road would bring prosperity (Coates and Morrison, 2015, p.331). Stefansson corresponded, planned the publicity and exchanged maps with some of these groups, like the Wahpeton-Portal Highway association, from North Dakota, attracted by the potential benefits of a highway from North Carolina to Alaska. He ordered a total of 600 copies of the Foreign Affairs issue including his article "Routes to Alaska" to be sent and billed to the association's president, Halvor L. Halvorson whom he had briefly met at the University of North Dakota forty years prior (Stefansson, 1941) and who was presiding the U.S. Canada-Alaska Prairie Highway Association, dedicated to the promotion of a Midwestern road (Halvorson, 1941).

The endeavor of the Alaska Highway is representative of the limits of Stefansson's influence. Despite his efforts to showcase his expertise, his attempts to have the American war authorities redirect the path failed. However, by converging his efforts with cities' associations, and Alberta's Minister of Public Works (Stefansson, 1941), Stefansson demonstrated his capacity to step in public debates and contributed to the popularization of a defense project through his writing. Furthermore, the writer was also committed to another venture designed to enhance Alaska's autonomy.

Following rising demands in oil and petroleum products from 1914 on, promising locations on the Mackenzie River near Fort Norman were identified and successfully exploited in the early 1920s (O'Brien, 1970). Given its reputation of being the most northernly producing oil field in North America, the site of Norman Wells was expected to play a great part during World War II. The Canadian Oil - or Canol - project consisted of a network of 2,600km of oil and oil-derivative pipelines, starting from Norman Wells, Northwest Territory, to serve Alaska. Firstly discussed in August 1940 between Prime Minister Mackenzie King (1921-1930, 1935-1948) and President Roosevelt in Ogensburg, New York, it was built for a total cost of 130 million dollars between April 1942 and 1944. The pipeline was designed to transport 3,000 barrels per day, and a refinery capable of processing the same quantity of oil was also constructed at Whitehorse, Yukon Territory. At the same time, 7 airfields were built by the American troops throughout the Mackenzie basin, and were soon doubled in numbers, as the American military pressurized Canadian officials to invoke the allpurpose War Measures Act in order to exempt the foreign workforce from recently established rules, allowing them to prospect and drill without permission nor control (Barry, 1992, p.401-403).

Stefansson had experience on the subject of Arctic oil, as he had mentioned the matter in his very early publications. In My Life with the Eskimo (1913), he noticed the smell of Alberta tar sands near Fort McMurray, while considering a natural gas well as "the torch of Science lighting the way of civilization and economic development to the realms of the unknown North" (Stefansson, 1913, p.61). In The Northward Course of the Empire (1922), he used the photograph of an oil well as a symbol of ongoing development. In December 1941, while trying to redirect the track of the Alaska Highway, he had sent a six-page long report to General Embrick (1877-1957), Head of the Inter-American Defense Board, in which he stated his experience of the region and early interest in oil infrastructures (Stefansson, 1941). Finally, in his autobiography he recalled: "With my suggestions for the location of the road, I also forwarded to General Walter Pyron, the Army's petroleum expert, a proposal for developing the Norman Wells oil area. General Pyron attended a conference in late April 1942, in which the Canol project became a living, if somewhat lame, enterprise. The general's notion of the geography of Alaska and northwest Canada was something less than sharp. He had heard of Whitehorse, though he was not sure whether it was in

Alaska or Canada. He did know that it was on the proposed Alaska Highway" (Stefansson, 1964, p. 329).

By the end of May 1942, Stefansson was visited by a team of American engineers from Bechtel-Price-Callahan in his New York office, seeking for advice in their new, confidential, venture. The explorer called his friend, Canadian historian and filmmaker, Richard Finnie (1906-1987) who previously had been part of five expeditions to the eastern Arctic, who had lived a year among the Inuit for a year, and made the first direct flight from Norman Wells to Whitehorse (Finnie, 1987; Geller, 1996). Just like Stefansson, Finnie had written several texts in favor of the Norman Wells field's exploitation. One of the contractors told him: "I've just read your new book, Canada Moves North. Dr. Stefansson recommends you highly for your up-to-date knowledge of an area where we have a War Department contract to undertake a secret defense project. We've had no experience in northern Canada, so we'd like to hire you as a liaison officer and consultant" (Finnie, 1980). Finnie became the first Canadian employed on the Canol Project before relating his experience regarding the classified operation in 1945 (Finnie and Bechtel-Price-Callahan, 1945) and producing a documentary film on the Alaska Highway (Finnie, 1987). Both he and Stefansson are considered as the first public voices promoting a pipeline construction (Finnie, 1980). On June 4, 1942, Stefansson received a call from the Coordinator of Information, William J. Donovan (1883-1959), about the probability of a Japanese attack in the Alaskan peninsula. He immediately wrote a printed version of their discussion on this discussion to the attention of the new Director of the Office of Strategic Services, adding some corrections: "You remember, this was practically what you and I discussed with the Vice President in relation to an oil pipeline from Norman to pour fuel into the Yukon River, and a road from the Mackenzie basin at Norman to the Yukon. To fight the Japanese effectively we must apply our strength from the interior, as the Soviets do, rather than having our main strength coastal and thus depending on the outcome of a naval warfare" (Stefansson, 1964, p.330).

Now regarded as the most expensive and controversial construction venture of World War II, the Canol project was quickly impeded by slowdowns, notably due to commercial rivalries and political divisions, a situation that only shed confusion during the work and disturbed the local population. The construction process was of extreme arduousness: due to the terrain's roughness only 5,293 tons of the 18,222 tons of shipment sent to Norman Wells arrived unscathed. Although a wasteful and environmentally destructive experience, the extraction process was a technical success as the 3,000 barrels per day goal was largely exceeded and went up to 20,000 barrels per day (O'Brien, 1970). Abandoned less than a year after its completion, in the winter of 1942-1943, the Canol project immediately suffered from a backlash for its enormous cost and was turned into an easy political prey. Senator Harry S. Truman (1884-1972) voluntarily used his congressional investigation of the Canol's expenditure to increase his own prestige (Twichell, 1993). As for Stefansson, his exact role in the building of the pipeline remains obscure by the restriction of information applied by authorities, yet it is certain that the perspective of sending 30,000 workers to Arctic conditions had raised his interest. The fate of these projects, both highway and pipeline, illustrated once more his hazardous relationship with distant instruction that previously had scorned his credibility after his attempt to claim Wrangel Island for Canada in 1921-1923 (Stefansson, 1925; Webb, 1992).

Since Ottawa was almost never perceived as a military threat by Washington, it was the Japanese military build-up and invasion that changed the way the United States looked at its distant Arctic land, with Stefansson's contribution. From a disregarded territory with a marginalized political status, little infrastructures, and a non-diversified economy, no other institution than the Department of War played a more significant role in the region's transformation (Hummel, 2005) and scientific understanding (Farish, 2013). Even by the end of the war, Stefansson's implication was not over. With the Air Corps being one of the most active branches of the military, but not the most credited for its actions, Stefansson and a team of historians were charged to compose a "heroic story" of the air forces in Alaska. However, divisions quickly emerged among the group as its members had been asked to "write history, not make it", but did not want to offer the same kind of tales published in magazines. Eventually, the project failed and was not published, leaving the matter to war veterans (Stefansson, 1964, p.352). He was accompanied in this unsuccessful task by Lieutenant Colonel William S. Carlson (1905-1994), a former member of the University of Michigan Greenland Expedition of 1928-1929, and leader of another academic expedition to Greenland in 1930-1931. Serving in the air forces during World War II, he was notably part of the construction of air bases in Canada, Greenland and Iceland, before becoming, with Stefansson, a driving force in the creation of the Arctic, Desert and Tropic Information Center - or ADTIC - in 1942, which he directed between 1944

and 1945 (Carlson, 1962). As American troops almost never fought outside of the country, the stretch of their global intervention called for the study of unfamiliar landscapes and terrains. Thus the ADTIC recruited any available expert, including French explorer Paul-Émile Victor (1907-1995), and Stefansson (Emmerson, 2010, p.110). Corresponding with both Carlson and geologist Laurence McKinley Gould, Chief of the ACTIC's Arctic section, Stefansson was recruited as an advisor in April 1943. Besides weather clothing and soldiers' rations, the consultant delivered two projects: a broad Overall Picture of the Arctic, and a 44-page navigation guide on the northern east coast of Greenland (Stefansson, 1943). Closed between 1945 and 1947, the Center was caught in the whirling dynamic of opening Arcticfocused science institutes. The militarization of Alaska had opened the way for further scientific exploration and experiments. Stefansson himself received General Buckner's enthusiast approval in regard to his idea of founding a governmental center of Arctic studies, similar to the British Scott Polar Research Institute of the University of Cambridge. After eleven months of fruitless attempts to convince the authorities about the need for such an institution. Stefansson received a letter from William I. Donovan (1883-1959), Coordinator of Information, and then Director of the Office of Strategic Services, whose positive message set the early stages of the creation of an Arctic center (Stefansson, 1964, p.330). The Arctic Institute of North America was eventually created at McGill University in 1945, where Canadian and American scientists were to work together. In February 1945, a permafrost field division dedicated to military engineering was established at the Northway Army Airfield, before merging with other initiatives into the Cold Regions Research and Engineering Laboratory of the U.S. Army, located at Hanover, New Hampshire, near Dartmouth College. Not only did the campus have a renowned Arctic center, but it also benefited from a new Professor with solid experience: Vilhjalmur Stefansson.

Conclusion: "Few can have known better than we the difficulty of battling with the doubled-edge sword of the cold war"¹³

Stefansson's relationship with the United States' military institutions was characterized by many ups and down, success stories but also failure, as he

¹³ Stefansson, 1964, p.363

experienced the course of action that made modern academics call Washington a "reluctant Arctic power" (Huebert, 2009). The final work that should have been his career's crown jewel, the *Encyclopedia Arctica*, was eventually cut short in 1951 by either a sudden disinterest in Arctic matters, or the consequences of Stefansson's involvement in Socialists groups. The Second World War had been a milestone in Stefansson's career, as his dream of a friendly Arctic firstly rose with the American-Soviet alliance before being shattered into pieces by the Cold War. The Arctic, as well as Arctic Studies, had become a battlefield. The Cold War and potential nuclear strikes canceled Stefansson's theories about the development of the American Arctic, reduced to the state of a buffer zone between the Soviet Union and the United States the bombers and submarines of which would continuously roam the Arctic's skies and sea. In *The Northward Course of Empire*, Stefansson had envisioned such traffic, but to a different purpose.

Author of twenty four books and approximately four hundred articles, Stefansson condensed in his publications an advanced portrayal of the Arctic mastery of his time and society. With his multidisciplinary approach, he placed himself at the crossroads of diverse interest, dynamics and cultural productions: engineer Simon Lake and his submarines tested under the ice in 1896, explorer Donald Baxter McMillan and his visual representations of the Arctic and its peoples, geographer Ellsworth Huntington and his environmental determinism, the Lindberg couple and their flights, but also General Mitchell and his foresight on Alaskan power. Most of all, Stefansson can be seen as the person who opened the Americans' worldview by including the Arctic in their cultural, political and military range. By insisting on the feasibility of Arctic development, and the threat a hostile Arctic would represent to mainland America, he contributed both to the end of cultural isolationism and the implementation of the idea that the United States had to expand its military influence for its own safety. Consequently, his multiple efforts can be seen as a window onto the American 20th century and the rebirth of an Arctic imperial nation, remembering its own past, and envisioning its future. Fatherless and penniless in his youth, Stefansson eventually rose from a rural family to government's office, and eventually received on his tombstone the eloquent title of "Prophet of the North". After all, as Stefansson has not failed to point out, on the nightstand of Commander James Francis Calvert's cabin in the nuclear-powered USS Skate, sent on a mission to become the first submarine to surface at the North Pole on March 17, 1959, lay a copy of The Friendly Arctic (Stefansson, 1964, p.302).

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