

Artikel 1

**Kayak dizziness. Historical Reflections
about a Greenlandic Predicament**

Hansen (1996).

I *FOLK; Journal of the Danish Ethnographic Society*. Vol 37, 1996. pp 51-74.

Kayak Dizziness

Historical Reflections about a Greenlandic Predicament

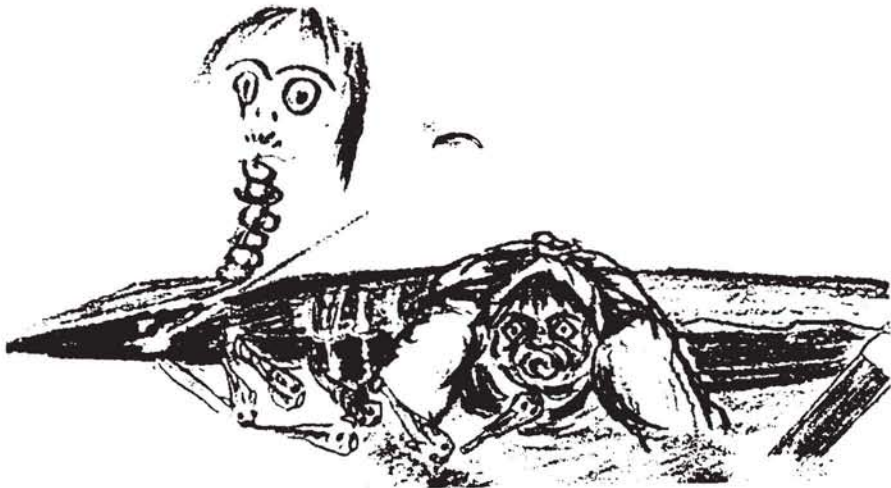
Klaus Georg Hansen

The Greenlandic word for kayak dizziness is "nangiarneq." In the middle of the 19th century kayak dizziness was invented as a disease by the Danish colonial authorities. Western medicine has, over the past 150 years, described this disease in varying terms. Though the Western narration have influenced the modern native Greenlandic accounts of the disease, a popular Greenlandic description still exists. The two descriptions, the Western and the Greenlandic are incompatible. It is necessary to understand this if the native Greenlanders suffering from this disease today are to be treated successfully.

Some years ago I was conducting fieldwork in a village in Western Greenland. I noticed that one of the men, that I had been in contact with some years earlier, was now so afraid of sailing that he had completely stopped as an active fisherman and hunter. I was told by the others that he suffered from *nangiarneq* (kayak dizziness in English). I was very surprised by this. I had read about kayak dizziness, but as many other people I thought that it had disappeared, now that they no longer used the kayak for hunting.

Since I came back from my fieldwork, I have gathered material about this disease, which is invalidating to Greenlanders, as doctors in Greenland presently have no cure.

In this article I will outline, how the disease has been described by both Europeans and Greenlanders.¹ There are both Western medical descriptions and Greenlandic popular accounts of the disease. Firstly, I will go through the changes, which have happened within Western medical characterizations, then I will sketch a popular Greenlandic understanding of the disease. Lastly, I will



Figur 1. Tupilak skræmmer kajakmand til døde. Tegning af Gêrteraq, Gert Lyberth (1867-1929). (© Grønlands Nationalmuseum & Arkiv).

look at the influence that Western medical explanation has had on the development of the Greenlandic popular description of kayak dizziness.

Kayak Dizziness Described as Intoxication

There have been three different phases in the history of Western medical description of kayak dizziness. Its genesis can be found some 130 years ago. This first period has to be seen in respect to the Danish colonial administration which in 1838 initiated a health care program for Greenlanders.²

In 1864 the first collective medical portrayal of diseases in Greenland was published. The work titled "Notes about Greenlandic Illnesses" written by Dr. Carl Lange after his investigative travel in 1863. This was the first time kayak dizziness was represented as a medical problem. Lange wrote:

We should dedicate some space to the nervous diseases. It seems as though, as is normally the case with savage people, including the Greenlander, that they have a minor role, but nevertheless this seems to be increasing. Therefore, headache, buzzing in the ears, palpitation and trembling hands just as "dizziness in kayak" is becoming more frequent. (Lange 1864: 53)

In the same period American doctor Georg M. Beard, became known for his argument that nervous diseases was a symptom of modernity (Pontoppidan 1886: 331ff; Bertelsen 1905: 325). The Greenlanders' path towards civilization therefore lead to an increased number of nervous diseases. Of the reason for the nervous "dizziness in kayak" Lange wrote:

It does not seem unreasonable, that coffee has some of blame. When a population for extended periods consume on average 4-5 lots [2-300 gram] coffee per person daily, it does not seem unexplainable that palpitation, dizziness, and similar symptoms are found frequently among them. (Lange 1864: 54 (my addition)).

The understanding that the nervous systems disease kayak dizziness was an intoxication caused by civilization, has been put forward by several doctors, who wrote about the disease at the turn of century (Hagen 1866: 55; Hastrup 1886: 783-4).³ In 1882, Dr. Lambert Christian von Haven wrote that

...the strong Dutch tobacco could be the reason why so many cases of the dizziness, which robs many Greenlanders of the ability to get into a kayak occurs. (Haven 1882: 190).

Along with the idea about intoxication of coffee some doctors were claiming as late as 1900 that kayak dizziness was caused by intoxication through tobacco (Meldorf 1900). Though doctors did not entirely agree on the actual cause of the nervous disorder, there was no disagreement that it was caused by intoxication. The first medical definition of kayak dizziness molded the disease into a disease of civilization – an intoxication from the benefits of civilization.

For doctors at the end of the previous century, something noble about the savage Greenlander persisted. Thus, von Haven stated that rachitis only occurred in families with Danish blood (Haven 1882: 187). In 1900, Dr. Holger Kiær claimed that in his opinion it was “possible that mental diseases ... do not occur among pure Eskimo populations” (Kiær 1900: 463).

As late as in 1909, Dr. Thomas Neergaard Krabbe found it likely that the Greenlanders were relatively immune to sexually transmitted diseases (Krabbe 1909: 81). His assumption was not left uncontradicted, because a new way of looking at Greenlanders had emerged in the medical field at the change of the century. This also meant the appearance of a new definition of kayak dizziness.

Kayak Dizziness Described as a Pathological Fear

In the beginning of the 20th century the Western medical characterization of kayak dizziness changed character. The man who led the way for this second period in the Western medical explanations of kayak dizziness, was Dr. Alfred Leopold Bertelsen.

Bertelsen was to dominate Greenlandic medicine beyond his death in 1950. Not least since he through 1928-1948 he was the medical adviser for Greenland's administration.⁴ Bertelsen's principle contribution is a four volume dissertation of more than 800 pages from the late 1930s. The dissertation is entitled “Greenlandic Medical Statistics and Nosography” and subtitle “Investigations and experiences from 30 years of practicing medicine in Greenland.”

Bertelsen first arrived in Greenland in 1902 as a doctor for the Danish Literary Greenland expedition. He had been invited to participate by the leader of

the expedition Mylius-Erichsen. Bertelsen himself writes, that he had received a request from Professor Pontoppidan, to purposely study kayak dizziness (Bertelsen 1905: 113). The year before Pontoppidan had suggested that the Danes had a special obligation to study the kayak dizziness, "because it was a national disease" (Pontoppidan 1901: 59). In this connection he emphasized that "the disease (is) only connected to the kayak" (ibid.: 63). This is an assumption which has been in acceptance until the late 20th century.

Bertelsen brought home a large number of medical cases. Sixty of these cases were published in the "Bibliothek for Læger" (Library for Doctors) in 1905.⁵ These 60 cases have been the foundation of nearly all subsequent treatment of kayak dizziness. In 1970 an english version of Bertelsen's cases was published (Gussow 1970: 237-62).

Before I go deeper into the new aspects of Bertelsen's view of kayak dizziness I will give an example of the disease by quoting from one of the medical cases of 1905; one that Bertelsen obviously preferred, as he used it again in 1940:

M.L., age 37, Sukkertoppen. Arian-Eskimo descendant.⁶ The patient use to be an excellent sealer and kayak sailor. Eight years ago, a day in July at noon, he was out jigfishing for cod. He was no further out than the ground reflected in the shallow water next to his kayak; it was hot and the sky was clear, the sun shone right into his eyes. ...He had caught several fish, when he felt the jig go under. When he pulled it in, he saw that a sea slug had bitten, this sea slug scared him so that he let it go immediately and he started to tremble all over. It was as if something hot ran down his spine and along the legs, and he began to sweat heavily. At the same time he had a strong headache and saw spots dancing in his vision. ...The surroundings appeared to be double; the bow of the kayak seemed to be double and to be further away than usual, he had a feeling that the entire kayak was now longer. It also felt as though it tilted to one side, which made him lean towards the other. Now he sat for a little time like this and hardly moved, and then he slowly began to paddle towards land, still feeling that something unknown was coming from behind and trying to upset the craft.⁷...He shouted at another hunter, who was a little distance from him and as soon as he reached him, his condition improved, and shortly after he was back to normal. (After this follows descriptions of other attacks). (Bertelsen 1940: 181).

In his rewriting Bertelsen emphasized that fear was mentioned in all 60 cases; that "more than 50% had their first attack in quiet weather, with clear reflecting waves" (ibid.: 316); that more than 40% had the feeling that the kayak had turned (smaller) and taller; that in 75% of the cases it was a family disease (ibid.: 323); that most of them felt that the kayak had become heavier or that the paddle was lighter or that something from the ocean would come and harm them, something that no one dared or could look at.

Unlike Bertelsen, I will be particularly concerned with the latter aspect of kayak heaviness and paddle lightness, which Bertelsen doomed "in themselves unreasonable" (ibid.: 182). In his opinion, they confirmed the psychological character of the ailment.

In 1905, Bertelsen was heavily inspired by Pontoppidan's account of "Neurasteinen" (1893) and his "Psychiatric Lectures and Studies" (1893). However, Bertelsen also made his own contribution. This is particularly seen in 3 different areas. First, he established a new name for the disease; second he gave it a new characterization; and third, he based his findings on a new understanding of human nature. Let me elaborate on these three points.

Bertelsen wrote that all the 60 patients whose story he had published had turned to him with complaints, "for which the Greenlandic word is *nangiar-poq*" (Bertelsen 1905: 315). By selectively reviewing the word's etymology Bertelsen identified that the real meaning of the word is fear.⁸ On this assumption he concluded: "The translation 'to be dizzy' seems to be caused by a later era." (ibid.). To strengthen this point of view Bertelsen quotes Samuel Kleinschmidt's dictionary of 1871.

1) is afraid on dangerous places (on ice, at sea, on steep rocks etc.). 2) is dizzy when in the kayak, feels that the kayak tips or begins to sink (and then really sinks, trying to prevent the feeling). Is a disease. (ibid.: 314).⁹

Strangely enough it is not Bertelsen's own suggestion for a new name for the disease which influences in the second phase. It is very obvious that he is reluctant to talk about kayak dizziness, because in all the cases he put the word into quotation marks. The new name however, was only made official a few months after the publication of the 60 medical cases and until a doctor named Anders Johansen in a short article commented on Bertelsen's dissertation. The article by Johansen bore the title "Kayak-angst and similar conditions" (1905). This was the first time the word kayak-angst had been printed. One could wonder whether Bertelsen was sorry that he had not come up with the word, when it was so close to his own idea? It is not that Bertelsen had not suggested a new name. He had suggested the term "*laitmatofobia*" (ibid.: 321),¹⁰ but this name was hardly ever used. Later Bertelsen preferred the word kayak-angst even in an English publication from 1929 (Bertelsen 1929). Kayak-angst has since then been the name under which the disease has been known internationally. However, I maintain my preference for using the phrase kayak dizziness.

It was not only the name of the disease that Bertelsen had a part in changing in 1905. He also made it quite clear that kayak-angst – as it was now called – had nothing to do with intoxication. After he had reviewed all the cases he defined kayak-angst as "a pathological fear" (Bertelsen 1905: 321). Just as Pontoppidan, he was convinced that people suffering from kayak-angst were neurotic i.e. hysterical (Bertelsen 1905: 322; Pontoppidan 1893). It was also from Pontoppidan that Bertelsen adopted the idea that the disease is hereditary. Pontoppidan had talked about "hereditarily predisposed individuals" (Pontoppidan 1893: 47), but this was identified as "degenerated relations" (Bertelsen

1905: 322) and “nervously degenerated families” by Bertelsen. (*ibid.*: 329)

Pontoppidan shows no socio- or race-evolutionary undertones in his description of who were capable of having compulsive ideas. For Pontoppidan, heretity was centred on the individual, but Bertelsen transformed this into an evolutionary orientatin concerning people, which (“overall the effects are more subtle, on a lower step of education” Bertelsen 1905: 326). This point of view was made even clearer by Bertelsen 35 years later: “The frequency of kayak-angst among the Greenlandic men seems to show a certain primitiveness in the Eskimo mind.” (*ibid.*: 323).¹¹

In 1905, Bertelsen worked with the term “psychological contagiousness” (*ibid.*: 323), where by it was understood that a person suffering from kayak-angst could psychologically be contagious to other people. To Bertelsen this was a way of explaining why the disease was more frequent in some families than in others.¹²

In the above I have alluded to a new way of looking at the Eskimos, as Bertelsen put it. Nineteen century researchers seemed to be the last to let go of the remains of the Enlightenments’ noble savage. In the Greenlandic context, among other things showed by biologists – especially botanists – right until the end of the 19th century were interested in Greenlandic ethno-taxonomy (i.e. Lange 1880). In medical science, it was noted by that fullblood Greenlanders were considered more resistant than Europeans to particular diseases. But with Bertelsen, the race evolutionary view of mankind broke through in medical science focusing on Greenland. This was a way of looking at mankind that had existed for decades.¹³

At least one of the sources that Bertelsen used to support his new way of looking at mankind resulted in his actual tampering with quotes. In support of his argumentation that kayak-angst existed before Europeans arrived in the country, Bertelsen quoted a description from 1795:

Even among real Greenlanders there are many male persons, who are never capable of rowing and hunting in kayak, there are even people who do not dare to sail a kayak because of the fear that rises in them when they want to sail a kayak. (Bertelsen 1905: 331; 1940: 186).

Bertelsen used this quote both in 1905 and in 1940. Set in relation to the original the text which is quoted correctly, but Bertelsen left out part of the original version which emphasized another point. When the words were written in 1795, it was part of an argument against mixed marriages, i.e. mixed between Europeans and Greenlanders. The writer called Rudolph Lassen, asserted that from the Enlightenment view, that all populations by definition were considered to have the same abilities. The mixing of blood could therefore, according to Lassen, not improve anything for the Greenlanders. The point of Lassens’ example of kayak-angst was that this fear “may occur more frequently in mixed bloodlines” (Lassen 1795: 286). As this last text was of no use to

Bertelsen, it was quite natural for him to leave it out.¹⁴

From the Enlightenment point of view blood blending between equal races like Europeans and Greenlanders, is understood as a degeneration of the noble Greenlandic people. On the other hand, Bertelsen understood from an evolutionary point of view that the bloodblending elevated the primitive Eskimos race.

After Bertelsen's article of 1905 the disease had been put "in the right place in the system: 'The disease is not a form of dizziness but a phobia'" (Johansen 1905: 549). The description of the second phase was such that kayak-angst was a pathological fear, "a definite fear-psychosis" (Beck 1946: 169), which according to Bertelsen is the result of the primitive Eskimo's brain.

After Bertelsen, the suffering has only been investigated systematically twice. This was done by doctors Emma Vestergaard in 1939 (1939) and Ehrström in 1948-49 (1951). Both confirm Bertelsen's approach. Only once in this period did someone tried to describe kayak dizziness differently. This was the German expedition leader Rudulf Trebitsch, who after a trip to Greenland in 1906 (1910) and after having read Bertelsen and Freud, suggested that kayak dizziness was caused by "coitus interruptus" (Trebitsch 1907: 1906). But this German suggestion of solving the enigma of kayak dizziness did not receive further attention. One of the latest scientific treatments of kayak dizziness, where the disease is perceived as an expression of an abnormal condition is in an article in the "culture and personality" orientation by Seymour Parker from 1962 (1962).

Kayak Dizziness Described as Normal Fear

1961 marked the beginning of a third phase in the explanations of kayak dizziness. This new view of kayak dizziness's Western historical conceptualization is dominated by psychiatrists and psychologists. At the American Anthropological Associations meeting in November 1961 Zachary Gussow gave a lecture entitled "A preliminary report on kayak-angst among the Eskimos in West Greenland: A study in sensory deprivation"¹⁵ (1963). Gussow proposed the idea of "kayak-angst syndrome" (ibid.: 19ff). He based his studies on "an analysis of 13 cases out of the 60 kayak-angst individuals medically examined and interviewed by Bertelsen in 1905 (see Bertelsen 1905)" (ibid.: 19). Gussow distinguished between on the one hand, normal fear condition which anyone may experience, and on the other hand, an abnormal violence, with which the Eskimos reacted to this normal state of fear. Gussow concluded that the cultural factors emphasized the natural fear reaction.

The third phase's medical perspective of kayak dizziness, where fear itself is looked upon as normal, is significantly different from Bertelsen's definition of pathological fear. Opposition Bertelsen's description of kayak dizziness had appeared already in 1905. In the above mentioned article by the Dr. Anders Jo-

hansen the writer argued that kayak dizziness was not a neuropathic fear, but a physiological fear, i.e. normal. But this was in 1905 and the comments made by Johansen were never commented upon.

They did not appear again until 55 years later in 1961 in USA. Gussow was a medical student,¹⁶ but he made his point in front of a gathering of anthropologists. The description of kayak dizziness had until then been the domain of clinical medicine. However it was not only anthropologists who took up the issue from Gussow. Also psychologists and an engineer – John D. Heath¹⁷ – has since worked with kayak dizziness.

Anthropologist Kenneth Taylor also worked with the idea that kayak dizziness was a normal fear reaction. But not simply a normal fear reaction. In his model, Taylor also included genetical and cultural factors (Taylor 1963: 89) however without elaborating on what he meant by “cultural factors”. In 1970, Gussow published another article on kayak dizziness, and though the cultural perspective was toned down, he still considered kayak dizziness as the result of “stress response” to an “immediate and realistically dangerous situation” (Gussow 1970: 229-30).¹⁸

With “Chamber’s Dictionary of Psychiatry”, published in 1967, the disease was mentioned for the first time in an international psychiatric dictionary. In the dictionary the word is “kayak fright” (Brussel 1967: 131).¹⁹ In recent decades kayak dizziness has emerged as a “culture-bound syndrome” (i.e. Amering 1989, 1990). In many of these texts kayak dizziness appears as a classic example of psychological disorder specific to the Greenlanders, but by some of the researchers is considered to be an extinct disease, stemming from the notion that kayaks are no longer used in Greenland.

One of the core ideas within the third phase is its notion of sensory deprivation. Sensory deprivation is an obvious explanatory model for what could happen to a Greenlandic hunter, when he is out alone in sunshine and quiet weather far from the coast. The vision seems to blur, and the hunter loses his balance. The sensory deprivation model however, only explains a certain number of cases, and consequently can only partly explain the disease and not why the fear remains with the hunter for the rest of his life. This is where the cultural factor enters – the factor that Gussow mentioned in 1963. Even though Greenlandic hunters today do not use the kayak as a means of transportation, kayak dizziness is an invalidating disease and has not disappeared: the reasoning behind the disease lives and is reproduced until this day.

Within the realm of Western knowledge there has been few attempts to explain the cultural factors which Gussow touched upon in 1963. One of these attempts was made by the historian Daniel Mercur. In his doctorate dissertation of 1985, Mercur draws parallels to the symbolic death of the Greenlandic shamans in connection with the acquisition of healer spirits. Among other things he says:

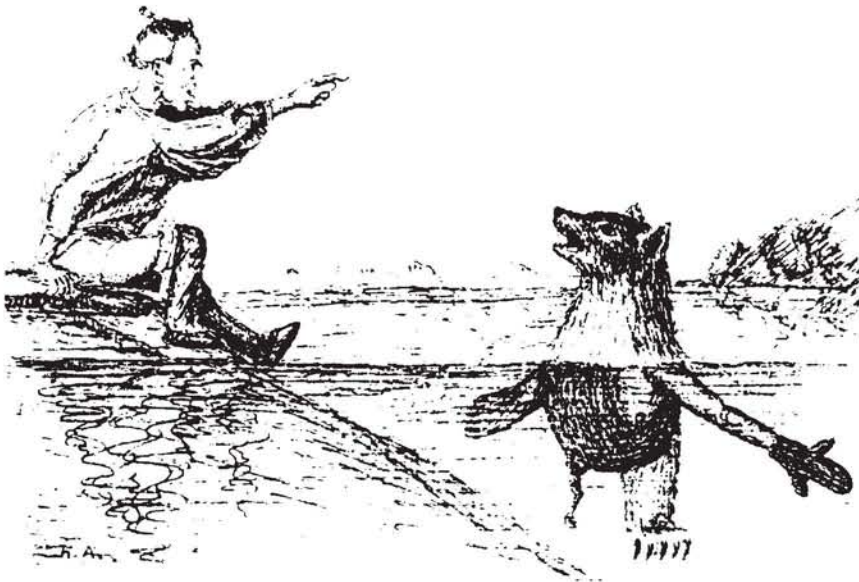
Whether I am correct in suggesting, that kayak-angst functions as an ecologically conditioned predisposition to initiatory death among the Inuit, there can be no doubt that initiatory death is a closely similar phenomenon (Merkur 1985: 190).

Kayak dizziness was therefore a kind of pre-phase in the acquisition of helping spirits. An interesting aspect of Mercur's model is that he includes the religious universe in explaining why Greenlanders react so violently. However, I do not believe Mercur carried his point through. Therefore, in the next section I will take up the thread from Gussow, and offer my view on which cultural factors influence the natural fear reaction in the Greenlandic hunters.

Kayak Dizziness Described as a Social Conflict

In popular Greenlandic renderings connections are repeatedly made between kayak dizziness and tupilaks.²⁰ This linkage however has never been discussed in the Western scientific literature on the subject. I think, that it is in exactly this linkage that popular Greenlandic understanding about kayak dizziness should be found. Several accounts of the nature of the tupilak associates the tupilak directly with the kayak. As an example Samuel Kleinschmidt translated the word tupilak in his dictionary as follows:

A monster, which people thought, that somebody could put together of certain bones and other things, brought to life by a spell and sent to overturn and kill a particular kayaker, after which it ate the intestines of the victim. (Kleinschmidt 1871: 382).



Figur 2. Heksen sender en tupilak afsted efter sin fjende. Tegning af Karâlê Andreassen (1890-1934). (© Grønlands Nationalmuseum & Arkiv).

By its nature the tupilak, is dangerous to look at (Pedersen 1963: 74). This attribute explains why Bertelsen's patients did not – or could not – look over the side or into the water. The tupilak attacks his victim in certain places (*ibid.*: 89), which explains why the person suffering from kayak dizziness are afraid of sailing in particular locations. There are even more conditions in the cases studied by Bertelsen, which can be explained by the popular Greenlandic tupilak discourse.

One of the stories I have found is from fictional literature. The story was written by the Greenlandic priest Otto Sandgreen. His approach presented in the book "An Eye for an Eye, and a Tooth for a Tooth" (1967) is similar to that of Christian Rosing presented in "Tunuamiut" (Rosing 1906). In the preface of both books a wish to be true to the non-Christian way of thinking is expressed. Both Sandgreen and Rosing have as the guideline in their descriptions a motive, which can be summarized as: "The more correct the description, the easier to fight it." In the foreword by Sandgreen it says:

The fundamental idea has been to communicate as well as possible and broaden the knowledge about our forefathers' customs ... the accounts which are told about are really believed to have happened to those involved – they are not at all considered as invented stories (Sandgreen 1967: 27).

These are words that we should remember when trying to understand the social dimension of kayak dizziness. In the chapter "The capable kayak rower gets kayak dizziness" we are left with a story, which contains all the elements seen in the narratives collected by Bertelsen (1905), but with a few additions to Sandgreen's version, which could only be made by a loyal commentator. In Sandgreen we get a picture of the social dimension, and an explanation as to why the hunter is frightened. The account stretches over 10 pages; I will quote only some passages.

Kuukujuoq ... could not be safe from his housemates; since he was more skilled than they, he knew that he was pursued.

As he moved over the surface – as quickly as he could, regardless of the times he needed to balance with a backstroke – the paddle suddenly felt heavier as if he struck something dense. And now he felt that his craft began to shrink, and he was struck with kayak dizziness. ... Later – when he was *prompted* to resume paddling – it was as if it too had become pliant. And for a short moment he saw something, which left his shadow ... – not something unfamiliar – but a trout in the water alongside the kayak, where he was about to put the paddle blade. Moreover, this was an enormous trout; yes, he had never seen one this size during any of his many previous fishing trips. The very moment he saw it, he tried to frighten it away with his paddle. Typically a trout will disappear at the slightest disturbance, but this one only scarcely moved. At once he realized that the situation was no longer humorous, as someone was secretly plotting to kill him with witchcraft, to which he had no means of defending himself.

...

There you are! In the end Kuukujuoq was hurt anyway. But fortunately not for long. He fought intensely to overcome his fear and dizziness and he won. So from here on, he was not disturbed by the trout. (Sandgreen 1967: 364-70).

Within the realm of Western medical knowledge, I have come across only one account that relates kayak dizziness with tupilaks. This story comes from East Greenland and was collected in the 1950s by Sara and Per Helms, who have both worked as doctors in Greenland. The account goes:

A skilled hunter saw from his kayak a big salmon, which appeared along side him. He tried to harpoon it, but it escaped, to appear a moment later on the other side of the kayak. He tried to harpoon it again, but with the same result as before. After this the salmon disappeared and nothing else happened, until the hunter came home, he was already thinking quite a lot about the incident. He and the other hunters had never seen a salmon behave this way, and the salmon had been looking at him in a very strange way, he was more and more convinced that it was a Tupilak, which had escaped, but from this day on he could not enter his kayak, every time he tries to do so he is struck with a headache and violent nausea which disappears as soon as he sets foot on land again (Helms and Helms n.d.).²¹

The account continues: "It is not the normal kind of kayak dizziness, which is also known up here." (ibid.). This remark reflects a deep insight into the diversity of symptoms.

Western educated doctors have never been able to come up with an actual cure for a tupilak or kayak dizziness suffering patient, because they have been unable to bridge the two incongruent traditions of knowledge; one embedded in Western medicine and the other within popular Greenlandic understanding. The cure within the Greenlandic context could occur on several levels. A first attempt towards a cure may lay with the hunter himself. Knud Rasmussen has this record:

A spell song to catch Tupilak.

If a kayak man suffers from feelings of fear, when he is sailing his kayak, he should walk around his house an early morning starting from the left towards right and say the following (under continuous outbursts):

Ija – ija

What is this thing leaving me?

An animal for bad luck

Ija – ija

cannot find me because I crept in here

ija – ija

because I crept into this fog like flower

in the white (cotton grass)

Now it doesn't know where I am,

it will return to it's starting point, it's mother

ija – ija

it has touched its mother. (Rasmussen 1921: 61-62)

Amulets could also be used. It is a wide-spread belief that especially amulets made from ravens worked well against tupilaks (i.e. ibid.: 48ff). It is therefore interesting that raven amulets in particular are connected with kayak dizziness. Several proverbs have been preserved, one of them says:

A hunter who has started to suffer from kayak dizziness, should immediately get hold of a live raven youngster, pull down his pants and sit on it until it dies. If he does so he will no longer suffer from dizziness (Lyngø 1981: 125)

Another proverb links the fear directly to tupilaks:

If a hunter suffers from nervous sensations of fear, when he is at sea, he should put a piece of mirror or a piece of mica in his kayak. The troll or monster, trying to scare him will then see his own reflection and escape. (Rasmussen 1979: 67)

In severe cases, a person suffering from kayak dizziness should get professional help from an *angakkoq* (a shaman). An *angakkoq* could catch and destroy the attacking tupilak in a seance. Accounts of inflicted hunters who were cured can be read in the books by Knud Rasmussen. After the favorable ending through a long dramatic *angakkoq* seance, the story finishes as follows:

The people in the house were heard to laugh happily in relief when the shaman told them that now they [the shaman's helping spirits] had it [the tupilak] up on the look-out mountain and were eating it, hacking away at it; and so large were the falcons [the helping spirits] that they looked like two bears eating; they ate it all up, and then flapped away northwards. The lamps inside the house were lighted, and all were very astonished to see that the wooden weapon the shaman had was all bloody...

... After that the hunter was never afraid again; the fear had left him, and he did good hunting for his fellow-settlers; and now it appeared that it was one of his own neighbors who had made a tupilak against him out of envy (Rasmussen 1938: 168 (My additions)).

In the past not everybody suffering from kayak dizziness was cured. Robert Petersen has pointed out that in Greenlandic myths and stories of the past there are several accounts of hunters who only went hunting in quiet weather. Petersen looked at these stories as possible examples of hunters who have had mild attacks of kayak dizziness and who have learned to live with their fear (personal communication).²²

The Influence of Western Medical Descriptions on the Popular Understanding

The first professional Western medical characterization of kayak dizziness from the 1860s seems to derive from popular Greenlandic description.²³ Since then medical explanation has developed within an increasingly hermetically closed field. The same cannot be said about the development of popular Greenlandic explanations. One of its sources of diversity is precisely Western medical explanations.

In the colonial context 150 years ago when the Danish occupation of Greenland changed from "parasitic" colonialist to "intensive" colonialism,²⁴ the governing authority invented categories whereby locals could be divided into groups subjective to colonial rule. One such category was kayak dizziness. To

the ruling authority, people suffering from kayak dizziness were a sub-category identified as “the class of idlers” (Rink 1855: 226).

Unlike the categorization of things, categorization of people has consequences for not only the one who has the power to define but also to the one who is being categorized. This two-sided effect has been theoretically described by the Canadian philosopher Ian Hacking. His point is, that descriptions of people is a potential for action (Hacking 1986).

In the case of kayak dizziness, the colonial powers’ way of depiction was supposed to outcompete an already existing popular reasoning. The complexity of power relations and competition between different descriptions have been described theoretical and perceptive way by medical anthropologists. One of the fundamental points is the distinguishing between illness and disease (i.e. Kleinmann 1988; Seeberg 1992); the distinction between on one hand, the single person, family or social group’s experience with the disease and on the other hand, a different and widely accepted explanatory account of the disease. An argument is that the less these descriptions of the disease coincides with local social knowledge, the more difficult it is to make a proper diagnosis. This could leave the external Western descriptions in a worse position than the Greenlandic descriptions, but here the power relations have had an effect. The colonial power has been in control of the knowledge producing institutions such as schools, churches, and mass media and through these has been able to impose external Western descriptions into the society. The result is that Greenlanders today are familiar with Western accounts of the disease, but from here to making them an integrated embodied part of practiced local knowledge is a long way. Western explanations are known, but are still secondary to local popular accounts and practices. Western medical descriptions therefore continues to have a low percentage of cure.

Today, we have three roughly divided descriptions of kayak dizziness, a Western medical, a Western psychological, and a Greenlandic. As we saw earlier there are differences between the two Western descriptions, but they start from the same point. The Western psychological description is not known in Greenland and therefore has no influence on the Greenlandic description of the disease. In the following, I will therefore refer only to the Western medical description and it’s influence on the Greenlandic popular description of the disease.

There are two important points where the Greenlandic and the medical Western description disagrees. One is the status of the disease – is it an illness? The other is the limitation of the disease – how many people are involved?

The punchline of Western medical account would be: “Yes, the disease is an illness, but only one individual is involved” whereto the Greenlandic response would be: “No, the disease is not an illness and there are others involved”. In the following, I will elaborate on the contents of these differences.

Although Greenlandic descriptions lack clear demarcated phases found in Western descriptions, we can nevertheless identify periods before and after Western influence. Obviously, we need to keep in mind the differences between the kinds of written documentation found for the popular Greenlandic description and for Western medical description.

Early non-medical descriptions can primarily be found in dictionaries. In the three pre-Kleinschmidt dictionaries in Eskimo, the word *nangiarpoq* appears. The word is also explained in two Greenlandic dictionaries from respectively 1750 and 1804, and a dictionary of the Labrador Eskimos in 1864 (Egede 1750; Fabricius 1804; Erdmann 1864). In all these dictionaries *nangiarpoq* is translated as “being scared”. For instance being scared at sea. There are no mentioning of it being a disease or about dizziness.

Apart from the dictionaries there are four descriptions of the disease as such from before 1860. One of these is Bertelsen’s publication from 1795, which we have already discussed. In this description fear *is* emphasized. There is an even earlier account (possibly) in Crantz’ “Historie von Grönland” from 1770²⁵ and another from 1806 by Giescke (1878: 31). These descriptions from 1770 and 1806 are both in German. Giescke mentioned hunters who were kept on land because of dizziness. In yet another brief description from 1842, colonial official Jens Mathiesen made the following remark:

The construction of the kayak is ... so reeling ... that just a feeling of queiziness or dizziness, feelings that the Greenlanders suffer from quite often, brings [the hunter] in danger of death. (Mathiesen 1842: 11-12 (My addition)).

Here Mathiesen refers to the normality, not the pathological in his explanation. Like the other three early European non-linguistic and non-medical descriptions, he does not describe the disease through Greenlandic terms. It seem as though the Greenlanders did not actually use a name for the disease and that the name was invented by Western medicine in 1864. This view is supported by descriptions which appeared in “Atuagagdliutit” in 1926-27. In these versions a hunter is attacked by a creature while sailing his kayak. Nowhere in these descriptions is the word *nangiarneq* used (i.e. Rosing 1926-27: 114). Kleinschmidt’s dictionary of 1866 is the first entry to construct a compound meaning of the word. He writes that *nangiarneq* combines an ancient Greenlandic definition and a contemporary European definition of the word – and it is after the European definition that is added “Is an illness” (Kleinschmidt 1871: 232). This implies that the earlier Greenlandic definition did not consider kayak dizziness an illness. As is the case with many Greenlandic words, certain grammatical conjugations have been given a specific lexical meaning, as is the case with *nangiarneq*, which today has become kayak dizziness. The verbal form of *nangiarpoq* continues to have the somewhat broader meaning “to be scared”.

The changes that the medical description brought about in the 18th century

can also be seen in the dictionaries. Until 1864, the translation of *nangiarpoq* was single namely “to be scared”, but in Kleinschmidt’s translation from 1866 as earlier quoted, the word has two meanings. Since Kleinschmidt, all Greenlandic dictionaries have translated *nangiarpoq* as both fear and dizziness in a kayak (Ryberg 1891; Schultz-Lorentzen 1926; Bugge 1960; Bertelsen and others 1977; Bertelsen and others 1990).

The Western medical description spread quickly in the Greenlandic population (Bertelsen 1905: 111). It was only through the influence of Western medical descriptions that kayak dizziness became an illness and acquired a specific Greenlandic name. In 1866, a book was published in Greenlandic with a title which in English would translate into “Reading Material for a Home With Patients.” In this book we find a section describing kayak dizziness (“qáiname nangiartarneq” in Greenlandic):

To be afraid of sailing a kayak. Most people who are afraid of sailing a kayak have started out by drinking too much strong coffee. Therefore those experiencing the onset of fear should stop drinking coffee.²⁶ The head should be rubbed with distilled water²⁷ ... or in salt water; the hair should not be too strong.²⁸ People who are not afraid of sailing a kayak should drink thin coffee so as to assure not becoming afraid of sailing a kayak.” (Hagen 1866: 55).

Two other popular medical books have been published (Hastrup 1885; Hastrup 1905). The availability of such popular medical texts illustrates the impact of colonialism in spreading of a Western knowledge. One of the medical books in Greenlandic described here was published in 1866, 1885 and in 1905, but already in 1856 (Narparsimasonut 1856) another popular book was printed in Greenlandic (see Oldenow 1957: 13-15). Each of these were distributed throughout Greenland and the only available literature of this type written in Greenlandic. Oftentimes, these early non-religious Greenlandic books were used until they were well worn.²⁹

At the turn of the century, several doctors noted what they regarded as an increase in the disease’s frequency (Meldorf 1900; Krabbe 1909). The increase in the number of cases, should be understood, I believe, as a consequence of the Greenlandic population acquiring a new name for a series of common symptoms. It could also be because popular symbols of protection – such as amulets – did not have the same position in the Christian cosmology. Emma Vestergaard wrote in 1939, that one of the cases that she was presented for as kayak dizziness, was a common epileptic attack (Vestergaard 1939: 3). In popular description of the disease such a clear demarcation does not occur, which could support the assumption that it was not until the advent of Western medicine, that the disease was considered an illness.

In spite of a massive influence on the Greenlandic population with a European explanation model, in Greenlandic popular explanations kayak dizziness has never been considered an illness in the Western way.

A Western medical description of normal fear states, that fear should be identified with a specific cause.³⁰ This is actually the characteristic of Greenlandic descriptions: fear is tied to a specific cause. However, the fear described in connection with kayak dizziness in the Western medical descriptions is expressed as an unexplainable fear, only because the Western medicine – unlike in the local knowledge – does not accept tupilaks as “real” (physical) concrete reasons for the fear, even though this explanation is widely recognized in Greenland. This is where the two knowledge universes cannot be compared.

A Greenlandic sense of the difference between Western and Greenlandic descriptions of the disease was properly expressed in the earliest first hand description of kayak dizziness. In 1905 the hunter Adam Nielsen in a letter to Knud Rasmussen, had the following short remark about the disease: “A man can be the cleverest supporter, but if he is attacked by kayak dizziness, which no doctors can cure, you sink down in poverty.” (Nielsen 1905: 23)

In 1936 the subject was taken up in the Greenlandic newspaper *Atuagagdliutit* by a hunter, Nathanael Petersen, who suffered from kayak dizziness. The reason why Petersen wrote about his disease was that he did not think that the Danish authorities gave it sufficient notice. Nathanael among other things wrote:

When I got this disease [kayak dizziness] I felt very ill. I sought help from several doctors, but the medicine the doctors gave me had no affect. It is as though this disease is very difficult to cure. There are several factors which can make kayak dizziness emerge. Until now I have not seen or heard of anybody who have been cured from kayak dizziness. (Petersen 1936: 1-2).³¹

In 1981, Hans Lynge expressed the same opinion. “Kayak dizziness has been investigated by several researchers, but I am not sure that anyone should have found the reason.” (Lynge 1981a: 33).³²

As these Greenlandic descriptions of kayak dizziness implies, there still exists a popular description in which the disease is not considered an illness. This popular Greenlandic explanation model exists along side a Western medical description, where the disease is considered an illness. The two explanation models however are not equal. In spite of the fact that popular description has a common validity, it has to be neglected if you seek treatment, as no treatment exists today based on Greenlandic explanation models.

In the popular explanation model kayak dizziness is a necessary and normal reaction to something frightening. It is not the person suffering from it who is ill, but somebody else. Kayak dizziness is an expression of social tension, which could have been created by the person suffering from kayak dizziness, without wanting to do so he has created an environment for envy or jealousy. Kayak dizziness was a natural part of the strategies for solving conflicts which were intact and worked in the Greenlandic society. These strategies for solving conflicts have been described earlier (Hansen 1991). In popular Greenlandic

cosmology, it is the envious person who is ill. The “Illness” is called *ilisiinneq* – which shortly can be translated with witching by creating a tupilak.³³ This, within the traditional Greenlandic explanation model, is the decisive factor in for kayak dizziness is an attack from a tupilak sent by a witch or by someone envious or jealous that has created this creature of mishap. All Greenlanders who have inflicted these emotions knows the risk of being object of revenge. It is never he who is insulted or envious who is struck with kayak dizziness, but rather the opponent. This is also the reoccurring theme in the narratives Bertelsen collected. For example:

It is known that the patient in 1887 was attacked by an opponent suitor who tried to murder him with an harpoon from behind. However he was not hit, but for a long time he feared his life [and later suffered from kayak dizziness] (my additions). (Bertelsen 1905: 127).

Bertelsen does not comment on the social dimensions of kayak dizziness. Only when other members of a household suffer from kayak dizziness, does he note that there is talk of a family disease. Bertelsen explains this by stating that these families are degenerate.

I disagree with Bertelsen on this point. I see the phenomena of other members of the same family suffering from kayak dizziness as an expression of social tensions in family clans.

Western medicine limits the disease to the individual, with it's origins in the biological composition of the individual, and presently in Greenland treatment is based on this premise. Many Greenlanders who view the illness as generated by social tensions stand in opposition to such perspective. In a popular Greenlandic understanding it is not the person suffering from kayak dizziness who is ill but a disdained or jealous tupilak creating opponent in the conflict.

Conclusion

The early Western medical models of explanation which dominated from the middle of the 1800 century until the middle of the 1900 century described kayak dizziness as an abnormal condition – either as intoxication or as a pathological fear. From this perspective, one is unable to come to grips with the context in which the disease make sense. The disease was to these external observers by definition illogical and therefore one could not look for the inner logic.

Gussow's reflections about the disease in the beginning of the 1960s created an opening for a new understanding of kayak dizziness. His description of the disease changed the view of it from being an abnormal and partly hereditary disease with a background in the racial primitivity to its becoming a normal fear reaction embedded within a cultural context.

What I have done here has been an attempt to describe the inner sense of the Greenlandic cultural understanding of kayak dizziness. I think that Gussow is correct when he states that the determining factor in most cases is sensory de-

privation. This has now become the prevalent Western medical understanding. The phenomenon which we in the West give a cultural related scientific explanation, in Greenland has a cultural related tupilak explanation.

In Greenland today the popular explanatory popular model does not include a treatment. Whether a popular model can survive or not is an open question. More than 15 years after Greenland was granted home rule there is no official support to these local understandings.

NOTES

1. This article is a revised edition of an article published in Danish in 1995 (Hansen 1995). After its publication I have received a number of reactions and through these become aware of additional concerning kayak dizziness. These sources have been incorporated in this article.
2. With revolutionary conclusion made by Graah following his expedition in the mid-1830s, it was generally acceptable that Scandinavians in Greenland had become defunct. This created a vacuum in the idea for Danish occupance of Greenland. The new view was that the Greenlandic Eskimos required help; this being one of the reasons for the establishment of a health care system.
3. In 1883 Hastrup had been quoted his yearly medical description to the Danish authorities that he understood "dizziness in a kayak ... as a type of epilepsy" (Hastrup 1883: 212 (also see Bertelsen 1940:187 note 4)). The linking between epilepsy and kayak dizziness is not mentioned by Hastrup in 1886, and this way of explaining the disease has never been used by medical doctors since.
4. A short biography of Bertelsen is found in Fabritius & Houmøller (1957: 140). More recently an interesting article about Bertelsen has been published (Permin and Christensen 1995).
5. In 1940 Bertelsen himself says, that he returned home with 130 medical cases from Northern Greenland (Bertelsen 1940: 185). Unfortunately, it has not been possible to trace the remaining cases. Henrik Permin believes that it is very likely that the original records, including the missing cases are to be found in The Bertelsen Archive at the Arctic Institute, Copenhagen (personal communication).
6. This was what Bertelsen, in 1905 had called "mixed descendance" (Bertelsen 1905: 119). In that version, the patient's genealogical table with notations about who suffered from kayak dizziness was also noted (1905: 120).
7. The 1940 text reads "were going to," whereas in the 1905 version reads "should".
8. A condition which Hastrup had mentioned already in 1886, but this had no consequence in his understanding of the disease (Hastrup 1886: 83). Hastrup was the first person to dedicate any attention to the disease. Among other things he noted that "it is one of the diseases which the Greenlanders fear the most" (Hastrup 1886: 84).
9. The entry in the Kleinschmidt encyclopedia reads: "1) Is afraid in dangerous places (on ice, at sea, on steep rocks (zc.); 2) Is dizzy in kayak: thinks that the kayak tilts or begins to sink (and then really sinks, trying to prevent the feeling. Is a disease)." (Kleinschmidt 1871: 232). As can be seen in Kleinschmidt's last sentence ("is a disease") Bertelsen's quote has removed the parenthesis. Thus it appears as though it has to do with the entire word and both meanings. To Kleinschmidt dizziness was the disease, but by removing the parenthesis Bertelsen made it appear as though both fear and dizziness were a disease, and it is this difference Bertelsen sought.
10. The word "laitmatofobi" is derived from the greek "laitma" which means "ocean" or "ocean depth". It can therefore be translated with: "Fear for the ocean or ocean depth".
11. By primitivity, Bertelsen among other things understood impulsiveness (Bertelsen 1940: 176). In this Bertelsen distanced himself completely from his teacher Pontoppidan, who distinguished clearly between compulsive actions as kayak dizziness and impulsiveness (Pontoppidan 1893: 58).

12. Using the term psychological contagiousness, is not the only proof that the perception of psychological diseases has changed from Bertelsen's time until today. Bertelsen for example, looked at homosexuality as a psychological disease (1940: 190ff).
13. In the 1870s, Henrik Rink was the first to describe the Greenlanders from a strictly evolutionary point of view (i.e. Rink 1877).
14. Bertelsen had not completely let go of his "pre-evolutionary" schooling. Among other things he has written a very interesting article about "Popular Medicine in Greenland" (Bertelsen 1914).
15. Sensory deprivation is a phenomenon noted during and after the Second World War, between war prisoners, among others. Sensory deprivation is a denomination for the complications which can arise when one is deprived of one of the senses.
16. In 1961, Gussow was employed at Department of Psychiatry and Neurology at the Louisiana State University School of Medicine in New Orleans (Gussow 1963: 18).
17. Departing from Gussow, John D. Heath having a detailed knowledge of the construction of the kayak worked with "The stage of dizziness of kayak fright" (Heath 1991).
18. Gussow documents two references to kayak dizziness, which unfortunately have not been possible to include. These are Rodahl (1953: 107) and Høygaard (1941: 72-73).
19. Kayak fright is listed in the dictionary linked to *pibloktoq*, i.e. Arctic hysteria. *Pibloktoq* is seen in several psychiatric dictionaries (i.e. Campbell 1981). The word *pibloktoq* is taken from Alaskan- Eskimos, a (related) word could be *perlerorpoq*, which means "goes crazy" (about people) and has rabies (about dogs). Regrettably it is too broad a subject to deal with in this article.
20. What tourists today are presented with as being tupilaks, are often a horrendous figure carved in tooth or bone. Earlier a tupilak was a creature of bad luck and looks similar to a dog, seal or similar animal. In the past a tupilak was created by a human with the sole purpose of killing a certain person after order from the one who had created the tupilak.
21. I have a similar account of kayak dizziness from Ulrik Lennert Sisimut.
22. After the publication of an earlier version of this article, I was interviewed about kayak dizziness on Radio Greenland. This brought forward several narratives from listeners. Among them, I was told a story about a named person who had overcome an attack of kayak dizziness by demolishing a tupilak. Unfortunately the family did not wish to publish their story.
23. A lay public (both Danish and English) have had access to descriptions of kayak dizziness. Rather than go into the details of these descriptions, I will list some of the references: Nansen (1890: 621, 666) (see also Bertelsen (1940: 184)); Nansen (1891: 87-88); Mylius-Erichsen (1904-05: 17); Nielsen (1907: 8-42); Storch (1915: 5, 139); Birket-Smith (1924: 423); Freuchen (1935: 242, 281-82); Kent (1935: 29); Freuchen (1936: 211); Kent (1936: 40) Beck (1946: 169); Freuchen & Salomonsen (1958: 277-78); Freuchen & Salomonsen (1961: 252-53); Fisker (1964); Fisker (1968); Lyngø (1981a: 33-34); Sandgreen (1987: 359-70); Thuesen (1988: 32-35). Strangely enough, I have not found any descriptions of the disease in neither Henrik nor Signe Rink (for example, Rink 1896).
24. Jan Kanstrup defines "parasite" colonialism as: "relations between a people and a colonial power built on marginal goods exchanged in a subsistence economy, where the colonial power as a principal is kept from direct influence into state affairs, and where the missionary is kept apart and exclusively concerned with the saving of souls." (Kanstrup 1990: 233). In the case of Greenland, Kanstrup puts "the later half of the 18th century as the time of the transition from 'parasite' colonialism." I agree with Kanstrup's time frame, yet I do not agree with him on the circumstances around the transition (see Hansen 1992: 57-61).
25. It is Bertelsen who has made me note this source. By going through the Greenland literature I have located the following in Crantz' (*Historie von Grönland*) 1770: "A Greenlander was five years ago (i.e. 1763) attacked with dizziness and after this dared not go out alone" (Bertelsen 1905: 31). I have tried to verify this very imprecise reference without success. The work Bertelsen refers to is a 3 volume compilation printed in Gothic text.
26. Concerning coffee, this description is today an integrated part of a popular Greenlandic understanding of the disease. I have been presented with this explanation when I have asked elderly Greenlanders about possible causes of the disease.
27. An ancient sedative.
28. Here it seems as though a Greenlandic remedy has snuck into the western medical repertoire of treatment.

29. There are several examples of how Greenlandic literature of the previous century has been copied (see ex. Oldenow 1957: 15-16).
30. In a Danish leaflet entitled "Fear and Panic Attacks, A Guide to Patients and their Families" (Rasmussen and Jørgensen 1990) they distinguish between normal and pathological (or unexplainable) fear. "It is typical for the normal experience of fear, that we know the reason why we are afraid ... inexplicable and irrational fear lacks the tangible, comprehensible expediency of normal fear, and you thus cannot answer the question: 'What are you afraid of?'" (ibid.: 3). The unfathomable fear is a "neurosis" (ibid.: 3).
31. What is interesting is that Alfred Bertelsen responded to the article by Nathanael Petersen (Bertelsen 1938). However there was nothing new in his reply.
32. For some reason, Hans Lyngø did not find it appropriate to include the 15 lines on kayak dizziness in the Greenlandic version of his memoirs. (See Lyngø 1981b: 9-41).
33. A parallel perception of the disease has been described by Jeanne Favret-Saada, within a French farming community (Favret-Saada 1980).

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