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Documentation, Information and the Animal Connection

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Let me start with quoting Suzanne Briet:

Is a star a document? Is a pebble rolled by a torrent a document? Is a living animal a document? No. But the photographs and the catalogues of stars, the stones in a museum of mineralogy, and the animals that are catalogued and shown in a zoo, are documents. (Briet, 2006, p. 10)

What about living animals in the wild, or half-domesticated animals in close contact with humans – can they count as documents? With Briet we can ask: how domesticated can an animal be, in order to be a document? Maybe we can say that the degree of order we induce on the animal decides its status as a “document”?

When we capture an animal and institutionalize it in a zoo, we classify this particular animal in accordance with a scientific paradigm. When the animal is placed behind a fence, humans have full control – and the processing of scientific facts through a controlled documentary cycle can start. My assertion is that wild, and half-domesticated animals can count as documents in settings other than those of Briet’s zoo, or her “stuffed and preserved” antelope (Briet, 2006, p. 10; Greneresen, Kemi & Nilsen, 2016, p. 1188).

In many traditional cultures (maybe every culture that still has a close relationship with nature) to take animals out of their natural setting in order to make them into documents is a weak form of documentation. They become dead objects with no connection to live processes. If we use the Sámi culture as an example; experience, knowledge and a personal relation to the object is crucial if the documentation is to be regarded as truthful and reliable. A living animal in the wild is a strong and robust document, a dead animal is not (Greneresen, Kemi & Nilsen, 2016, p. 1182).

But Briet lived in a time where the documenting institutions of the modern world expanded. She lived in one of the great empires with its colonies, its white spots on the map, the explorers, botanical gardens, all kinds of institutions established to document what was found in the colonies. Briet (2006) writes:

Let us admire the documentary fertility of a simple originary (sic) fact: for example, an antelope of a new kind has been encountered in Africa by an explorer who has succeeded in capturing an individual that is then brought back to Europe for our Botanical Garden (p. 10).

The antelope is “a new kind” for the explorer and the scientific institutions. We can assume that the inhabitants of the area knew it, and that they benefit from

these antelopes in different ways. The documentary value of the antelope thus is different in its original setting, compared with the setting where Briet sees it. The learning institutions of the modern world (the museums, the universities), the information- and communication systems (radio, newspapers, journals, encyclopedias, etc.) set up a more or less predefined “documentary path” for the captured, and as it turns out, dead antelope. In Briet’s (2006) words:

A press release makes the event known by Newspaper, by radio and by newsreels. The discovery becomes the topic of an announcement at the Academy of Sciences. A professor at the Museum discusses it in his courses. The living animal is placed in a cage and catalogued (zoological garden). Once it is dead, it will be stuffed and preserved (in the Museum). (...) The first monograph serves to establish part of a treatise with plates, then a special encyclopedia (zoological), then a general encyclopedia. (...) the catalogued antelope is an initial document and the other documents are secondary or derived (pp. 10-11).

But, if we take Briet’s (2009) preferred definition of a document: “any concrete or symbolic indexical sign [*indice*], preserved or recorded towards the end of representing, of reconstituting, or proving a physical or intellectual phenomenon” (p. 10), we can sense an opening for documents not processed by humans alone. And if we go to the initial paragraph in *What is Documentation?*, we can find an opening for nearly everything being defined as a document: “A document is a proof in support of a fact” (p. 9).

In many cultures the living animal – tamed, as the dog, semi-tamed as the reindeers of the nomadic people of the high north, or wild animals – are rich sources for documentation and information. Through thousands of years people have learnt from the relationship between nature, man and animals. The animal connection in traditional cultures was strong. The American professor in evolutionary anthropology, Pat Shipman (2010), says: “Domesticating an animal is fundamentally developing a means of communicating with that animal” (p. 521). In the evolutionary history she puts *the animal connection* on the same footing as the use and making of tools, symbolic behavior, including language and the domestication of other species.

The animal connection (...) comprises an increasingly intimate and reciprocal set of interactions between animals and humans (i.e., members of the genus *Homo*) starting 2,6 million years ago. The animal connection began with the exploitation and observation of animals by humans. Over

time, regular social interactions were incorporated into the animal connection (Shipman, p. 519).

Today one can see traits of the animal connection in the “widespread adoption, or alloparenting, of animals” (p. 519), where Shipman also includes antelopes! I will add that the animal connection was not only established by humans exploiting animals, but also probably the other way around, animals watching and getting closer to humans. Distinctions between human language and communication among animals have been studied extensively (Shipman, p. 520). We know that animals in the wild communicate with gestures and sound-signals communicating for example “danger” or “no danger” or “hawk attacking – get away,” so that the signal leads to an immediate response. Animals in experimental situations are capable of fairly sophisticated communication (Shipman p. 520, Bateson pp. 177–179). A research team in Semmelweis University, Budapest, used functional magnetic resonance imaging on dogs “to explore if and how dog brains segregate and integrate lexical and intonational information” (Andics et.al., p. 1030). They trained them to lay still in the machine as they scanned their brains, while watching which part of the brain reacted to word and intonational information. They found that

dog brains maintain intonation-independent lexical representations of meaning; that similar to humans, dogs appear to integrate lexical and intentional cues in speech to evaluate meaning; (...) lexical representation can arise and be separated from acoustics, even in a nonprimate mammal (...) Lexical processing does not appear to be a uniquely human capacity, (...). (p. 1032)

What we now see is that some animals have a higher capacity to evaluate meaning in human speech than we have realized up to now. Humans communicate in different ways with animals, and in many settings this communication is of utmost importance. Think of guide dogs and mountain rescue dogs and their communication with their handlers. In most nomadic societies the animal connection is fundamental; knowledge, information and values flow between nature, animals and people (Bates 2005, 2006).

Nature, according to Bates (2006), as it is shaped without the interference of people, contains inconceivable amounts of information that “exist independently of living beings in the structure, pattern, arrangement of matter, and in the pattern of energy throughout the universe” (p. 1034) Information can be acted upon by living beings in countless different subjective ways (p. 1034). Bates argues that information contained in a landscape – the formation of rocks, stones, the way

rivers run, how trees grow a hillside, formations of snow according to wind and temperature – are interpreted by, and forms the behavior of animals and people. Bates calls this first-order information patterns. People living off and close to nature must know how to interpret these patterns. Bates' model is well suited to explain how “natural information”, existing in the material world, becomes “represented information” when interacting with animals and human beings in different ways (2006, p. 1035).



*Sámi siida (family unit) moving toward the coast
Photograph by Ørnulf Vorren, Tromsø University Museum*

The Sámi relationship with nature and animals

The Sámi have observed forces of nature, change and stability, regularities and irregularities, for hundreds of years. They do not interpret this information every time a new situation occurs, the knowledge is stored in the herders' highly specialized language and in what Bates (2006) calls "enacted information: The pattern of organization of actions of an animal in, and interacting with, its environment, utilizing capabilities and experience from its neural stores" (p. 1036). The Sámi have specialized knowledge about nature, and nature-animal relationships (Turi, 2012; Jernsletten, 1994). The half domesticated reindeers in Northern Norway have trekked between the inland and coast together with their herders for 400-500 years, and before that the wild reindeers made similar trek. This movement of animals and people has been regular from year to year. The Sámi are "experts" on how the animals behave when on trek. They "read" and interpret the way the reindeer behave according to the psychology of the animal, the man-animal relationship, the landscape formations and the climate. A reindeer herder can tell how the herd behaves in a special terrain according to weather and season, and they can predict where it will move the next day, maybe the next week, based on their interpretation of this "enacted information" (Bates, 2006, pp. 1038-9).

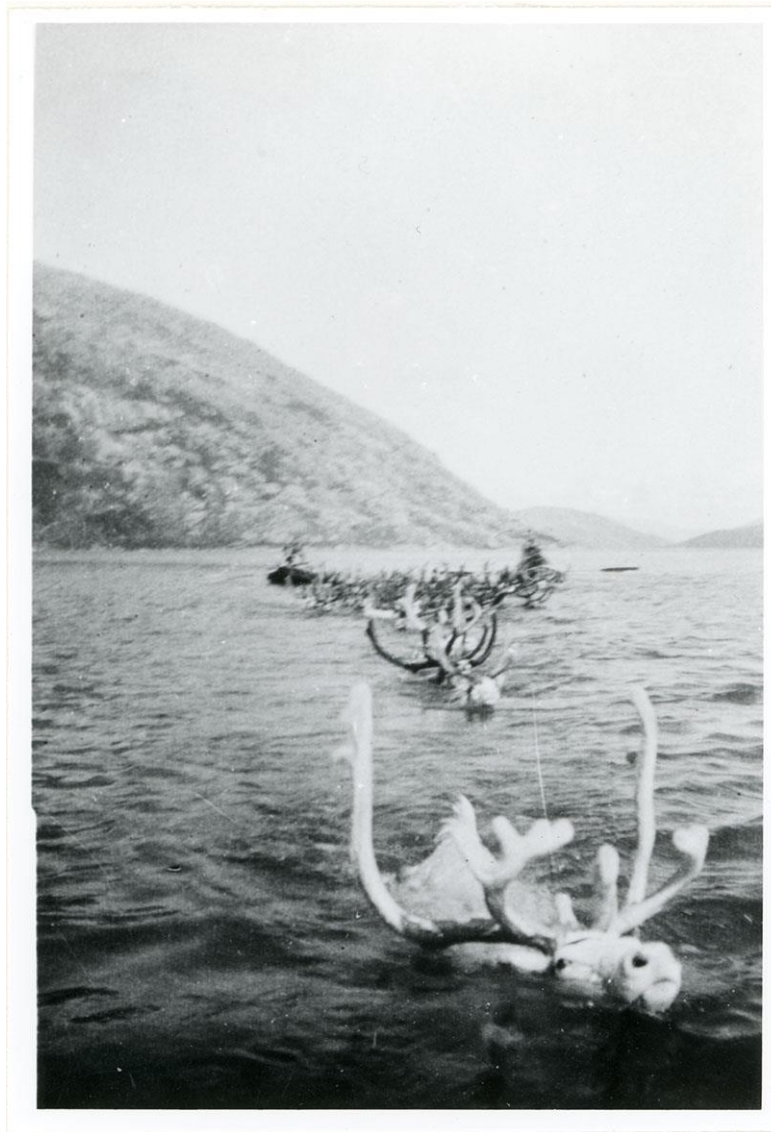
The routes the reindeer follow between summer and winter pastures are basically the same from one year to another, but there are also variations from the basic patterns. One year the trek can cross the ice on a lake, the next year the ice layer is too thin, so the herd cannot cross it. How do the herders decide when the ice is too thin for the reindeer to cross? They cannot read it in a manual or rely on the weather service. They observe the animals' behavior when they approach the lake, and combine these observations with their own knowledge from previous and similar situations (Nergård, 2006, pp. 34-65). The Sámi also use place names and stories as "encoded information". Bates (2006) defines this as "information that has symbolic, linguistic, or signal-based pattern of organization" (p. 1044). Many Sámi words for places in the landscape describe qualities related to how the reindeers behave, and the words store useful information for the herders. Stories are connected to special places like lakes, dangerous ravines or steep mountains, and they were told and elaborated upon among the herders when they came close to these places (Nergård, 2006, pp. 124-128). If reindeer have been killed by avalanches in a steep ravine 30 years earlier, the story and the reflections on the event will be told by the elder and experienced herders when they camp near the ravine. Names connected to these places often contain information about the dangers for humans and animals when passing through (Turi, 2012, pp. 83-101).



Sámi herders with their reindeer
Photograph by Jan Wikborg, Tromsø University Museum

Concluding remarks

The animal connection is reciprocal. Humans learn from animals and animals learn from humans. Documentation is embedded in human language (through terminology), in the neural patterns of the animals and in nature through traces and marks in the landscape (Bates, 2005). Bates uses the term “embedded information” for these processes: “the pattern of organization of the enduring effects of the presence of animals on the earth; may be it incidental, as a path through the woods, or deliberate, as a fashioned utensil or tool” (Bates 2006, p. 1036). We mould the world around us in such a way that it suits us, intentionally by building roads, houses, making equipment, printing books etc. We mould it unintentionally as when animals and people trek through the mountains for generations and make a path (Bates, 2006, p. 1036).



*The guide reindeer first, crossing a fjord
Photographer unknown, Tromsø University Museum*

The Sámi, in their close relationship with the reindeer herd, mostly relate to unintentionally moulding, like paths made of animal and man, traces after campgrounds and the way the landscape has been grazed. Natural phenomena of ephemeral character might also be a process of moulding: waves on a lake or a fjord are patterns of “matter and energy” (Bates, 2006, p. 1033) that inform the reindeer herders about sea currents, wind direction, temperature (cold water forms different waves than warmer water). When thousands of reindeer every spring

swim the waters between land and the summer pasture on the islands along the North-Norwegian coast, the pattern the reindeer form in the sea, their movements according to the current and winds, can be called unintentional moulding (Bates 2005). In the Sámi society these moulding activities are not written down in manuals or books, they are mostly transferred through stories, gestures and role imitation where the young herders learn from experienced adults (Nergård, 2006, pp. 17–34). Information is stored in all those words and terms that are in special use in the reindeer husbandry, with a rich variation for descriptions of processes in nature and nature-animal-man relationships (Jernsletten, 1994; Magga, n.d.; Turi 2012).

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