2019 "Expert Women in Nomadism: A Case Study about the Expertise of Work among Kel Ahnet Nomads in the Algerian Sahara Desert",

in: Hüsken, Thomas / Solyga, Alexander / Badi, Dida (eds.): The Multiplicity of Orders and Practices. A Tribute to Georg Klute. Köln: Rüdiger Köppe Verlag, S. 299-322.

299

# Expert Women in Nomadism A Case Study about the Expertise of Work among Kel Ahnet Nomads in the Algerian Sahara Desert

Anja Fischer

Spezialwissen ist nicht angelernt, sondern ist Eigenschaft, Ausdruck des Unterschiedes zwischen den Menschen.<sup>1</sup> (Klute 1992b:182)

### Introduction

Georg Klute describes in detail the work of male experts among Tuareg nomads in northern Mali (1992b: 176ff). In this paper, I intend to add a case study concerning female experts among Tuareg stockbreeders in southern Algeria to this topic. What does it mean for a Tuareg nomad woman to be an expert in nomadism? The nomadic pastoralism is not seen as aimless wandering in search of water and pasture, but rather as a system of animal management, natural resource sustainability and sociocultural organisation (Fischer 2018). The Tuareg nomads work as mobile pastoralists in some of the most extreme climatic environments in the world. The Central Sahara of North Africa is an area which can experience temperatures as high as 57°C in summer, accompanied by extremely low humidity and permanently hot trade winds. The prevailing aridness, the bareness, the scarce vegetation and the wildlife is quite challenging in the sand and rock desert. Only highly qualified and specialised nomads can live and work in such extreme conditions. As with most pastoral societies, the division of work is mainly – but not solely – determined by the types of animal that are herded (Chatty 2006: 11). Men manage the dromedaries, the watering of the animals and trade. Women manage the goats, the milk economy, the household, the nutrition, the dwelling, the children and the transportation of the household. Both men and women take care of natural resources like water, plants, trees or sand. Furthermore, some men and women are even experts and have an expertise in at least one field of work. An expert in nomadism has to have excellent skills or knowledge to stand out of the group of nomads. Some expert women among

<sup>&</sup>lt;sup>1</sup> Translation by the author: *Special knowledge is not learned, but is a quality, an expression of difference between people.* 

#### Anja Fischer

the Kel Ahnet people have particular expertise based on special abilities, knowledge, endurance and motivation.

However, this contribution does not examine what work means for the production, but what work means to the Tuareg people. Acting economically is seen as a social process. Hence, I follow the Bayreuth approach of the *Anthropology of Work*. (Beck 1996)

The study is based on extended fieldwork between 2001 and 2011 among Tuareg nomads mainly in the Ahnet mountains in Southern Algeria. Each winter season, I conducted fieldwork for about three months among nomads. I followed the nomadic people, for about three months each winter season. I used the method of participant observation, in particular the method of thick participation (Spittler 2001b) by taking part in different work performances. I used the method of participant observation, in particular the method of thick participation (Spittler 2001b) by taking part in different work performances. I used the method of participant observation, in particular the method of thick participation (Spittler 2001b) by taking part in different work processes. This enabled me to gain a deeper understanding of what work means for nomads in the desert.

At first, I will clarify some key terms and outline the state of research concerning the work of Tuareg nomads. I will briefly describe the work categories in Tuareg nomadism in order to understand the special expertise of some nomads. A brief description of an expert woman of the Kel Ahent provides an insight into her expertise. A discussion about the use of expertise especially in teamwork, and about the benefits and the motives of being an expert, leads to the conclusion.

# Nomadic work in the Sahara Desert

Ethnological research on pastoralism has strikingly neglected the issues of work and labour. (Beck & Klute 1991: 91)

The Tuareg are a non-state Muslim society of more than two million people. They live in an area that stretches across two million square kilometres in the African Sahara and the Sahel. The Tuareg society lives in and around the Adar mountains in North Mali, the Air mountains in North Niger, and the Ahnet, Adjer and Ahaggar mountains in South Algeria. The different groups of Tuareg people in the five mountain areas refer to themselves according to the mountain name for example as *Kel Ahnet* (people of the Ahnet mountain) or *Kel Adar* (people of the Adar mountain) and so on. Nowadays the main part of the society lives in the south of these mountain areas, in the Sahel region of Niger, Mali and North Burkina Faso. These days the Tuareg society is a marginalized minority in these countries. Since the individual

#### Expert Women in Nomadism

nation-states developed separately, the socio-cultural ways of life of each regional Tuareg group developed differently. Originally the Tuareg have been a mainly nomadic society, but many people have now settled down. However, several groups of Tuareg in the Central Sahara and the Sahel are still mobile pastoralists. Tuareg living in urban areas are experiencing low living standards, extensive corruption and high rates of unemployment. Repeatedly, violent rebellions by Tuareg men were waged against the governments of Mali and Niger (Klute 2013). The outbreak of violent conflicts in northern Mali in 2012 led to the displacement of more than 200.000 Tuareg (predominantly nomads) to neighbouring countries. Nevertheless, after a period of several droughts in the 1970s and 1980s, where many nomads were forced to settle down, a 're-greening trend' in the Sahara and Sahel region can be observed "For the whole Sahel, the satellite greening trend is dominant, and the present analysis points toward a large-scale increase of herbaceous production over 1981-2011" (Dardel et al. 2014: 350). In recent years regular annual rainfalls at the end of the summer season supports the mobile pastoralists in the Sahara and the Sahel region. "I would even suggest that since 1999 there has been a modest revival in the nomadic economy". (Keenan 2004: 187)

Early studies especially during the colonial area emphasised the work with dromedaries more than the work with goats. Household chores, construction work and the position of women as nurturers were written less about. The authors preferred to study the 'nobles', a small group of dromedary breeders who own many slaves. The authors in the colonial area and beyond often described Tuareg women as fat, lazy, and promiscuous and Tuareg men as sublime, mysterious, belligerent raiders. Félice-Katz (1980) assumed that a Tuareg nomad works for about two hours each day. Swift (1981: 82ff) calculated from two to a maximum of seven hours of work effort a day. However, these authors counted only the milking and watering of animals as work related performances. Watering animals is a typical male duty and furthermore not a daily duty during normal winter season with lush pastures. Other work like household duties and environment conservation were ignored. Based on such studies on 'work' studies in Africa the picture of a 'society of leisure' was created (Beck & Klute 1991). The intensive work of women and children in nomadism was not considered. So far, the work of Tuareg nomads has been described and analysed in detail in the Tuareg region such as the Ahaggar mountains in Algeria (Nicolaisen 1954, 1963), the Adar mountains in Mali (Klute 1992a & b), the Air mountains in Niger (Spittler 1998), and the Ahnet mountains in Algeria (Fischer 2008). Especially the Bayreuth research on an anthropology of work performances has led to remarkable results (see Beck 1996). Furthermore, Klute (1996) analysed the work among performances of Tuareg children. The recent publication called Anthropologie der Arbeit (Spittler 2016) is a profound summary of the Bayreuth Approach of Work including an ethnographic example of Tuareg herders. In general,

Anja Fischer

the majority of studies relating to Tuareg are published by French anthropologists, but only few of them treated the topic of work like Bernus (1990), Oxby (1987), Bourgeot (1987), Casajus (1987) and Claudot-Hawad (1993).

The mountain areas in the South near the Sahel have better vegetation and climate conditions for nomads than the areas in the Sahara desert. In the Air mountains many pastoralists often only move twice a year. They use a winter and a summer camp. Some Tuareg families live in small villages from where they manage a special kind of pastoralism, while (young) women are herding the goats in the surrounding area, (young) men are herding the dromedaries on other pastures for a while. In addition, they often practice agriculture and trade caravans (Spittler 1998). Hence Spittler (1998) titled his book about Tuareg in the Air mountains Hirtenarbeit (herders' work). In the Adar mountains Klute (1992b) describes the work of nomads as Die schwerste Arbeit der Welt (according to the book title). In Ahaggar and Adjer mountains in the Central Sahara Desert nomads practice several different kinds of pastoralism, sometimes combined with agriculture (Nicolaisen 1963; Badi 2012). The Ahnet mountains are the only Tuareg mountain area without any permanent settlements or agriculture. It is also the hottest and one of the most challenging environments of all Tuareg mountain areas in which Tuareg live. Thus, Tuareg nomads gather and practice their more or less mobile livestock breeding in the Sahara mountain regions and in the Sahel, not in the surrounding large plains of gravel and sand. Such an area with little natural resources for nomadism requires a sustainable approach to the environment.

Kel Ahnet nomads own dairy animals (female goats and female dromedaries), breeding animals (male dromedaries, calves, billy goats and yeanlings) and work animals (donkeys for transportation, watchdogs and male dromedaries for riding, transportation and carrying water). Sometimes, when times are rough and prey is scarce, jackals, fennecs, lynx and even cheetahs are posing a threat to the livestock of the nomads. Then, the children must guard adult goats on the pastures. But usually the adult goats as well as the female dromedaries that are currently giving milk are sent away to the pastures in the morning without a guard and return by themselves in the evening (Fischer 2014). During the night, the goats and female dromedaries rest in the camp and are guarded by dogs. The work animals normally pasture on their own around the camp with their front legs tied together. The owner always knows where they pasture. The other dromedaries that are not giving milk at the time as well as young dromedaries and sometimes also dromedaries kept for meat production graze often at pastures that are further away. These animals are occasionally checked up upon or herded by young men, depending on the conditions. The main focus of the nomad's economy is dairy and not meat production (Klute 1992; Fischer 2008). The mobility of the Kel Ahnet can be interpreted as being in the best interest

of the animals, but also for sustainability reasons regarding the environment. Furthermore, the Kel Ahnet nomads often change their place because of social reasons like a celebration or simply because they prefer one valley over another. Herding/ pastoral<sup>2</sup> duties are taken over by children or young adults, if they are done at all. The adults, who perform leading roles in the nomadic economy are taking on a lot of other duties. Etymologically, nomadism implies pastoralism as the basic economic system, but nowadays the term is used for any kind of mobile society like hunter and gatherer societies or mobile Romani traders. While 'nomadism' was rather seen as an economic concept in the last century (Scholz 1995), contemporarily the term 'nomad' usually refers to people with a mobile lifestyle (Fischer 2010). Nowadays, 'nomadism' refers to mobility, while 'pastoralism' refers to herding livestock on natural pastures (Salzman 2004: 17), although the word 'nomad' refers to both mobility and to a pastoral economy. Even if today the term 'nomad' is used for many kinds of mobile lifestyle, the term 'nomadism' still exclusively is used relating to livestock producers.

Kel Ahnet are self-employed, running their own businesses often much more successfully than their relatives in town (Fischer 2008). Even in a remote area like the Ahnet mountains nomads have close connections to local markets and beyond. The relatives of the Kel Ahnet, who live in towns, are still in touch with the nomads. New kinds of post-nomadic identities have arisen among the settled Tuareg. Vital aspects of urban migration are similar to those of their pastoral movements. Mobility has remained a key element of their identity, despite the devastating droughts of the 1970s and 1980s. It is based on a certain mode of foreignness, i.e. on resistance against the identificatory power of place. The former nomads remain experts in mobility, and connectivity. Highly mobile urban Tuareg developed new forms of business models which are based on nomadic strategies as well (see Musch 2012). They refer to themselves also as 'modern nomads'. (Scholze 2004; Kohl 2009)

Today, many Tuareg who would describe themselves as 'nomads' actually live for part, if not all of the year, in *zeribas* (reed huts) or even mud-brick houses. For them 'nomadism' is more of a cultural than a geographical or residential concept: it is more a state of mind. For instance, many of the Dag Rali who are now settled more or less permanently in villages have described themselves to me as 'nomads', using the term almost synonymously with the terms imuhagh or Kel Ahaggar. (Keenan 2003: 165)

In urban areas they often use the French term '*nomad*'. Tuareg have a term for '(hired) herder' (imawalen<sup>3</sup>). The word 'imawalen' is not exclusively used for live-

<sup>&</sup>lt;sup>2</sup> The term derived from the Latin word pastor – shepherd, feeder, to put to pasture.

<sup>&</sup>lt;sup>3</sup> The term derives from *awl* – *to keep an eye on/to look after*. (Foucauld 1951-52: 1493)

Anja Fischer

stock herders, but also for example for 'imawalen n afrarag' (guardians of the garden) (Foucauld 1951-52: 1494). The Kel Ahnet nomads do not refer to themselves as 'imawalen' or 'nomads'.

However, all nomads are specialists in nomadism, only a few are experts. What is the difference between an expert and a specialist? Within the Tuareg society, the *inadan* are a socio-economic group of people specialised on leather, wood and metal work. The group of *ineslamen* are specialised on religious exposition. Generally, Kel Ahnet are specialists in regard to nomadism, but that does not mean that every inadan or nomad is an expert. There are *inadan* who craft very beautiful, high quality silver jewellery. They are experts in their special field. Men as well as women can become experts, but in different fields. The expertise of an expert can be of mental or physical nature. Someone can know everything about the breeds of horses without knowing how to ride. Someone else be perfect in only dressage. The term expert derives from the Latin term expertus meaning tried, proved, known by experience. An expert is a person who has particular knowledge or skills in a special field. Experts in general neither act intuitively nor based on tradition, but according to their special knowledge. For a customer the expertise of an expert can be of high value. Thanks to the expertise, a customer can solve his/her problem much faster and save time and money. In this paper, I refer to experts in the economy of the nomads, not to the experts of e.g. socialising, politics or power.

During my research I experienced that the Kel Ahnet nomads usually do not praise somebody highly, but in a subtle manner (Fischer 2012b). If a Kel Ahnet say that a man has '*taitte*' (intelligence, sagacity) or he '*ezzey*' (knows), then it is as if they called him an expert. A person with an expertise is called *muzyat* (m.) / *tamuzyat* (f.) (Ritter 2009: 187), *a connoisseurs / person who knows well* (Foucauld 1951-52: 1943), *an expert*. (Ritter 2009: 415)

The division of work among nomads is built along gender and age boundaries which are quite fluid. Every nomad, no matter if they are a man or a woman, can do any nomadic work.

For example, the milking of the dromedaries is usually the duty of the men, but every female nomad is able to milk a dromedary. A nomad expert has, next to the basic skills additional skills, an expertise in a certain field of work. Nomad women actively participate in a lot more categories of work than men. Hence expert women more often have the chance to excel as experts. It is important to know the 'normal' work tasks of nomad men and women (Spittler 1996: 191, 2016), to understand the 'extra' work qualification of experts in nomadism.

#### Places and categories of Nomadic work<sup>4</sup>

In general, a Tuareg woman's life is one of hard work on a daily basis throughout the year. In contrast most men work very little, if at all. (Nicolaisen & Nicolaisen 1997: 712)

The family economy is situated in and around the home of the Kel Ahnet nomads. For Tuareg who grew up in permanent settlements the whole desert around the settlement is seen as bush, wilderness and even as dangerous (Spittler 1994). They call the uninhabited region *esuf* that means *wasteland* but also *solitude*. Settled Tuareg sometimes call Tuareg nomads 'the people who live outside' (Kel Atakas) or 'the people of the bush' (Kel Esuf) (Spittler 1994: 118).

In the eyes of the nomads, however, they do not live 'outside', but 'inside' their home. They often dislike the settlements or are even afraid of them (Spittler 1994: 110) just like the urban Tuareg are afraid of the desert. "The opposite of solitude is sociability. Whoever meets another person, chats and exchanges news" (Spittler 1994: 107). Conversation (edawanne) is particularly important to the urban as well as the rural Tuareg (Spittler 1994: 107; Fischer 2012b). Nomads live in the desert or more precisely in the valley (Fischer 2008, 2014). The camps of the nomads are always situated in vegetated valleys where there are pastures for the animals and the finest sand for the dwellings. The tent, is the home of the nomad family and the valley is their workplace. For a nomad not the whole desert, but everything outside a vegetated valley is the *esuf* (*wasteland/solitude*), 'the place without conversation'. Women avoid crossing the esuf on their own (Fischer 2012a, 2012c) and if they have to they always cross the desert with their tent, belongings and in a group. Only men work outside the valley in order to find lost animals or to trade with the settlements. The female goat herders as well as the male dromedary herders of the Kel Air live in single camps alone without their family in the desert. Therefore they often feel esuf (solitude) which makes their work even harder (Spittler 2001a). But they will return back 'home' after a while (Spittler 1998). The Kel Ahnet nomads live in the desert with their whole family and all of their belongings, and close together with

<sup>&</sup>lt;sup>4</sup> In order to give a brief overview, I attempt to cluster different main work performances together in categories. The mentioned work is performed performances are done in the winter season. The importance and kind of work of women and men change in the summer season (see Fischer 2017a). The description is based on the Kel Ahnet nomads in South Algeria and does not include rare tasks like the digging of a well. The mentioned work duties are performed during a 'normal' winter season without a drought. Exceptions confirm the rule. I make no claim of painting a complete picture of all work performances. The treatment of drought or crisis among Tuareg has been written about by several anthropologists elsewhere. (e.g. Spittler1989; 1991)

8 306

# Anja Fischer

other families. Their camp in the desert is their permanent home. There is no other home they return to. The valleys of the Ahnet are sparsely vegetated. A nomad camp usually consists of three to eight tents. The number of tents in a camp depends on the climate conditions. If it is a dry winter fewer tents make up a camp and if they had more rain more tents can be found in a camp. Two generations, parents and their children, live in a tent. Grandparents have their own tent, often until they die. The Kel Ahnet prefer marriages within the group, hence every neighbour in the camp is related, but very close relatives like the grandparents often join a different camp. Elderly people do not retire. The following categories of female work also include small children regardless of gender because they have to help their mother. Teenagers start to work in gender-neutral fields of work.

The following list contains mainly physical work activities. Planning, organisation, management, risk considerations and reflection are only a few additional nonphysical work duties that are part of every category.

### Work concerning the livestock

Most nomad women manage between 30 and 40 goats (Spittler 1998: 267; Fischer 2008). Women have to take care of the livestock by organising, breeding, herding and milking them. They are not permanently herding the goats. They have to feed the little goats: to do so, they hit acacia trees with a long stick (*askum*) until the leaves fall down which are then eaten by the yeanlings (Photo 1). They build cotes where they keep the little goats overnight. They have to catch the little goats and their mothers at least twice a day for lactating and milking.

Men have to milk the female dromedary and take care of the dromedary calves. The dromedaries for transportation pasture mostly alone around the camp. The main duty of men is to water the herds, but in the winter season when the pastures are lush, this is not a daily duty. Furthermore, they must look for runaway dromedaries often by spending days alone in the desert. Once in a while men have to brand and neuter the dromedaries.

### Work concerning the nutrition

Women are responsible for feeding the family especially by managing the dairy economy. Nomads can make a living by drinking only milk (Smith 1978; Bernus 1990; Fischer 2017b). Women collect and store milk daily, and produce buttermilk, butter and cheese. They then divide the milk portions among the family members. Women prepare meals daily and feed the little children. They bake bread in the sand,

prepare sauce and do the dishes twice a day.<sup>5</sup> Women also cook meat, but only occasionally. А main daily duty of women is to gather firewood. The wood is needed bake the to bread and to light up and heat the tent in cold winter nights. If the waterhole is close to the camp women fetch the needed water.

If the waterhole is further away the men fetch water with dromedaries. Another duty of men is to occasionally slaughter

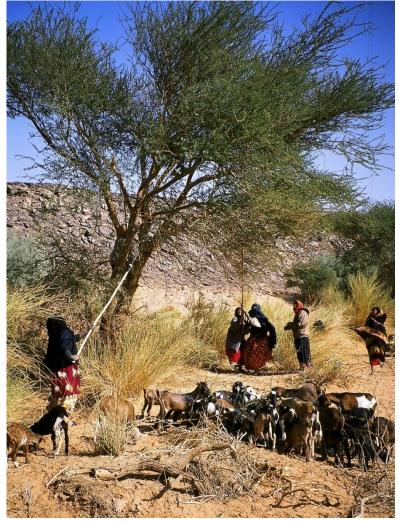


Photo 1: Teamwork of nomad women to feed the yeanlings in the Ahnet mountains, Algeria ( $^{\odot}$  Anja Fischer, 2004)

animals and to gut them. If the men are on their way outside the camp they prepare meals by themselves.

<sup>&</sup>lt;sup>5</sup> Nomads do not eat fruit, vegetables, roots or wild seeds. Sometimes children eat some resin or the inside of a bark. This kind of food is eaten as dessert or in times of distress (Smith 1978; Nicolaisen 1954: 26; Fischer 2008). They can nourish themselves exclusively by milk. "The Tuareg can live without meat all year round." (Nicolaisen 1954: 78).

# 10 308 Anja Fischer

# Work concerning the dwelling

Women are responsible for the dwellings: they build it, keep it clean, repair it and dismantle it. They build and place wind screens, trestles, storages, stables and so on. Women are the architects of a nomad camp.

# Work concerning moving

Women organise and perform the transportation of the dwelling, the children, food, household items and the goatherds. Men are responsible for the moving of the female dromedaries and their calves.

# Work concerning the body

Women bathe the small children. They delouse and braid the hair of their children. They wash and fix the clothes of the family members. Nowadays, young men strengthen the bought sandals by stitching the soles down.

# Work with raising the children

Women take care of their babies. They feed, swaddle and dandle them etc. Women are responsible for the upbringing, education and support of children.

# Work with items

# Items for animals and transportation

Women can make ropes out of old cloth to tether the little goats. They produce and repair their own dromedary reins and saddles including decoration. They make long sticks (*askum*) to feed the little goats. Men produce fetters for dromedaries out of plastic threads. They produce and repair transport saddles for donkeys and dromedaries.

# Items for nutrition and household

The women prepare and tan the hides. Women sew leather bags for milk, water and the food stock. They craft small items like boxes for tea glasses. Men can make parts of tools like the shaft for a hatchet. They can also make traps for wild animals like gazelles or mouflons.

# Items for dwelling

Women build all the items of and for the shelter like the poles, the roof, mats, racks or wind screens.

### Work with the environment

Livestock management is a crucial work. in an challenging environment. Considerations like where to find the best pasture, for how long can it sustain how many animals, is it better to let them graze near the trees or far away, or is this an area with dangerous wild animals have to be considered. Questions such as where can I find good firewood, how much can I take, how far can I carry it or how much bark and how many branches can I cut off a tree without damaging the tree's substance permanently arise. Furthermore, weather conditions in the area and how long the water in the well will last has to be taken into consideration. Waste management or rather in the case of the nomads recycling management is also quite important. (Fischer 2018)

# Work with people

Relationship management is quite 'hard work' in the desert as the neighbours are very close and always present, even more so as they are closely related. Couples must deal with their relationship but also with others e.g. when they mutually leave the camp. Furthermore, hospitality is also of great importance among nomads.

# Trade

Nomad men are responsible for sales and purchases of goods. They travel to the settlements and sell the livestock. They buy all required items like clothes, tools, dishes, blankets, food, and so on. Nowadays, sometimes retailers come to nomad camps by car to sell items and buy livestock.

### Additional areas of work

Especially when a family has several unmarried grown-up sons, there is not a lot of work for them during winter. Hence, men search for additional income opportunities, like a job as herder. Nomad men like to work in tourism as guides or cameleers, but the jobs are rare and highly competitive. For nomads it is hard to find a paid job in the villages due to the local competition. Sometimes men chase wild animals, but that is less a duty or a need rather than an activity to pass the time. Kel Ahnet neither practise agriculture nor caravan trade.

# 12 **310**

### Anja Fischer

Nicolaisen and Nicolaisen (1997: 712) claim that "adult males have little to do when at home, and their craft skills are extremely poor", while Dahl (1987: 249) and Klute (1996: 212) write that pastoralists always have to work.

To sum up, men's main duties are to take care of the dromedaries, watering and trade, while women take care of the goats, the nutrition, the dwelling, the milk economy and the children. Women have permanent work obligations, while men have a more ambulant work concept (Fischer 2008). Per example women have to milk the animals on a daily basis in the camp, men occasionally search for lost animals. While women have a daily work routine, men occasionally work the whole day and much less on the next day. It is possible to make a living of livestock in the desert, but not only by dromedary breeding (Keenan 2004). A woman, e.g. a widow, can sustain herself and her children in the desert with goats, which occurs quite often (Nicolaisen 1954: 11; Keenan 2004; Fischer 2008). Today even retailers arrive in the camp so that single women can trade on their own, or an older son can take on trade and the work with transport dromedaries. But women can also use donkeys for transportation. A widower would not be able lead a household on his own not even with the help of children. He has to marry again or live in the household of a married child. The work of women is of greater importance in the nomadic economy and they exert considerable influence over economy matters in general. (Nicolaisen & Nicolaisen 1997: 712; Fischer 2008)

However, every man can perform the work of a woman and vice versa. Sometimes the wife helps the husband to milk the female dromedary or the men help a highly pregnant wife to load the dromedaries. But this is the exception, not the rule. Men and women have a broad knowledge about all kind of animals.<sup>6</sup> As Tuareg often say *edunet wer olan (all people are not created equal)*. Not every nomad performs his or her work duties the same way. Some nomads are even experts like the following example of Nuna demonstrates.

#### The Work of the Expert Nuna

Nuna<sup>7</sup> is a Kel Ahnet woman. She was born in the Ahnet mountains about 60 years ago and has given birth to a son and a daughter. Her husband died a few years ago.

<sup>&</sup>lt;sup>6</sup> "In general women lack the necessary ecological and technical knowledge of camel management" (Bourgeot 1987: 111). After about ten years of field research among Tuareg women I can confirm that Tuareg women do have very good knowledge about dromedaries. They can do every task, they see and they comment on every part of concerning dromedaries work in their lifetime, although they concentrate on the goats. Even the focus of conversation is about the livestock and the environment. (Fischer 2012b)

<sup>&</sup>lt;sup>7</sup> The name Nuna is a pseudonym.

Her son just got married. She lives together with her 12 years old daughter in a camp of 3 to 4 tents. She does not always travel with the same group of nomads. It is not unusual for a camp to split up or to merge with another one. Nuna is a very sociable person and often young people gather at her tent to have a mutual conversation in the evening. Then she joins them or goes to the neighbours to drink a tea.

She had lived in a town for a while. Nuna said that she does not like to watch television all day long. She prefers living in the Ahnet desert. Nuna said she felt locked up in the house and she prefers the vastness of the Ahnet mountains and the life with animals.

Like all of the married women in the camp, she manages the household and a livestock of about 40 goats. She or her daughter prepares meals twice a day. If a woman in the camp needs a new saddle, then Nunas skills are in great demand. She knows how to fix components rectangular to each other by using a leather strap. She is ingenious, accurate and has the endurance to finish a task.

One afternoon all married women of the camp gather. A new owner of a saddle had already crafted all its wooden components. Nuna is very good at bending up the wooden arcs over the fire for the side parts of the saddle. All women then assemble the saddle together. Three carved sticks decorate each side of the saddle. Each wife carves a stick as souvenir. Although Nuna can carve very well, that time, in her eyes, her stick turns out unsatisfactory. She is disappointed with herself and become so emotional up she even starts to cry. It is quite rare that a Tuareg nomad gets emotional in public (Fischer 2012b). Nuna takes her work quite seriously.

In the morning the women walk together to feed their yeanlings. They hit or drag down branches of an acacia tree until the leaves fall down (Photo 1, p. x9x). Nuna is quite skilled in this task and she often points out the lushest branch. The women tether the little goats overnight using a long cord with loops. Every married woman uses these kinds of tethers, but they do not have the same method of tethering. Nuna always tethers every yeanling on the same loop every night, while her neighbours do not tie the goats in a fixed order. Nuna can lure her goats by calling their name. She also lets the little goat for a long time in order to catch it (Fischer 2014).

Once her son were away in order to look for lost dromedaries. The brother of her husband, who normally lives in a village, was visiting the camp and took care of the dromedaries. They had a dromedary herd in the camp for once. One day a vehicle with guests came along and the brother refused to control the dromedaries. He preferred to have a conversation and tea with the guests. Hence, Nuna went to herd the dromedaries in the desert on her own, which is according to the Kel Adar nomads 14 312 Anja Fischer

the 'hardest work on earth' (Klute 1992b). While Nuna is highly qualified in some fields of work, she is not keen on other areas. She does not like to braid hair. Her daughter always suffers silently due to the hard pulling of her hair.

Once a young woman wanted to construct a box for tea glasses. She had the components but did not know how to measure the wooden boards of the box. She came to Nuna with a large wooden panel. Nuna drew six rectangular pieces of the box on the panel. Nuna is an expert among the Kel Ahnet nomads.

# The Expertise of Nomads

A nomad man can be a dromedary expert, e.g. in castration (Klute 1992b: 181), taming (Klute 1992b: 177), guiding trade caravans (Klute 1992b: 183; Spittler 1998), tracking animals (Spittler 1998), and/or branding (Fischer 2008). It is hard to find a male expert on dwellings, childcare or nutrition. Nobody asks a man how to build a tent. However, some men can bargain better with traders than other men. Expertise in negotiation can benefit the expert monetarily. Some men can produce e.g. cords quicker and better than others can. But no men would produce cords for their neighbours or even sell one to them. If a family needs a new shaft of a hatchet then the husband starts to craft the shaft out of a piece of wood. If he fails, he may get advice from an expert in the field. An expert will maybe help him, but nobody will craft a whole hatchet for somebody else.

Tuareg women can have expertise on goats. Some women know more about how to treat illnesses, how to lure an animal or to deter older yeanlings from suckling. Some women can produce more butter in the morning then others can, some manage their milk better and produce more cheese than others (Fischer 2017b). Consequently, these women can manage their livestock better than others. That is also a direct benefit of expert knowledge. Female expertise e.g. on dwelling is even more obvious than e.g. a men's expertise on trade. A stable tent with a solid wellfixed roof and a clean yard is a clear symbol of the owner's expertise. Tents built by experts are always well tight and have no holes. Everything has its fixed place in and around the tent. All the poles of the tent are well grounded. It is quite difficult to dig a hole of 50 cm in the dry sand. If a person starts to dig the surrounding sand start to fill up the hole. In addition, it is quite a challenge to nourish a family in the middle of the desert without a kitchen and a nearby grocery store. New studies even demonstrate the 'power of food' (as a women-centred social action) which plays a central role in the form and process of pastoral political life (Holtzman 2002). The special skills of some women are also made obvious by their self-made items. Some women can sew very dense seams on water bags or milk bags (Fischer 2017b). Their seams are even and solid. The plaited ropes of these women are also very even, soft und strong at the same time. The women often handcraft together during a meeting in the afternoon. A female expert on crafting might give some advice, but no expert would sew a whole milk bag for another woman (Fischer 2017b).

Some women are highly talented in loading a dromedary. Items are just hang on the back of the animal and not tied down with ropes. Hence, it is necessary to balance the loading, otherwise, items would slide down. While some women work out how to balance the baggage at once, others have to make their dromedary kneel after a few steps to adjust the baggage. Being an expert saves time and work.

Nowadays, especially in urban regions, Tuareg use the term *ashurl*<sup>8</sup> for *to work*, especially for physical work performances (Klute 1992b: 53ff.). However, Tuareg have a term for *to work* called *ahiru* (Ritter 2009: 41; Foucauld 1951-52: 658). According to Foucauld (1951-52: 658) *ahiru* is the original verb for *to perform mental or physical work*, similar to the loanword *echdem* from Arab language. *Tahore* (noun of *ahiru*) can be translated to *the physical or mental work*, but also *the artistic completion of an object* (Foucauld 1951-52: 659). This term is most commonly used to mean 'very good work'. If a woman crafts a very fine milk bag, then the other women appreciate the work by calling it *tahore*. In that sense, *tahore* is the result of expert work.

#### The teamwork with experts

Normally every family works on their own.. But there are exceptions. Men conduct teamwork e.g. when castrating a dromedary by capturing it and holding it down, but usually an expert leads the knife. The same procedure is used during branding where the expert leads the branding iron and the others assist him. Trade caravans are also a form of teamwork among Tuareg men, including experts like the caravan guide.

When the women go together to feed the yeanlings in the morning, a woman with expertise on the *askum*-stick is highly in demand. The female expert knows exactly at which point of the branch it is best to hook the *askum*-stick before shaking the branch to get the most leaves. Every wife in the camp helps to pull the *askum*, but only the expert points out which part of branch will get maximal results. Hence all women benefit from the work reduction thanks to the expert and of course due to the fact that the women collaborate. Nuna for example is somebody who has the mind, the skills and the motivation to be an expert.

The production of large items like a woman saddle for a dromedary (Photo 2, see p. x17x), a new roof of a tent or a new hut is teamwork. Even when a family has a group of guests, every wife will help the female host to prepare the dinner.

<sup>&</sup>lt;sup>8</sup> The term *ashurl* derived from Arab language.

16 314

Anja Fischer

When women jointly produce an item, they do so under the leadership of at least one female expert. Only a few women among the Kel Ahnet know how to build a rectangular or know how to tie wooden pieces fix together with leather strips. And, as demonstrated by the example of Nuna and her emotional outburst, many experts take her job quite seriously especially within teamwork. The future owner of the item arranges for every helper a meal with yeanling meat and butter during or after the teamwork as a gift.

### The benefits of being an expert

A veanling is the standard 'fee' for expertise help, but it does not count as payment (Klute 1992b: 178; Fischer 2008). The 'fee' can be in form of a living yeanling for providing expertise one to one (Klute 1992b: 178) or in form of a meal with yeanling meat when working as a team (Fischer 2017b). In reverse, if the new owner does not prepare a meal with meat the whole group of women will be upset. It is seen as a 'gift' rather than a payment. Tuareg have several terms for 'gift' (Ritter 2009: 287), which one is applicable depends on the circumstances. Ritter (2009: 287) reports that women who work together in the Ahaggar mountain demand from men who walk past them to give them a *tawaqqint* (ar. gift), they emphasise that by throwing needles and spindles after them. Gift giving in pastoral societies is geared towards meat (Dahl 1987: 252). However, just because nomads do not accept money for their work in this case does not mean that they accept no payment at all. Nomad men look for wage labour like as hired herders and they take money for their service in tourism as cameleers. Women sometimes craft items like water bags for sale in the settlements. These are services as specialists in nomadism but not as experts. For instance, inadan (craftsmen) produce items like jewellery, and they accept money from other inadan for their items. Nomad women sometimes sell their butter or cheese in the settlements. Nomads like the Kel Ahnet do not sell milk at all (Fischer 2017b; Blench 2001: 33). Selling milk is believed to not be a blessing, because then the goats will give less milk. (Spittler 1998: 263)

## The Motivation of an Expert

An *anthropology-of-work* study does not only examine the work performance and the interaction but also the work motivation and work ethic (Spittler 2016). Spittler (1998: 251ff.) described good and bad Tuareg herders. The features of a good herder are that he is highly qualified even more importantly, that he has an above-average

#### Expert Women in Nomadism

work motivation (Spittler 1998: 251). These features distinguish him from the bulk of herders (Spittler 1998: 251). Therefore, he is not only highly qualified but also highly engaged with his work.

The Kel Ahnet named Mohamed<sup>9</sup> is a very clever young man. He always tried to be the best in a competition. He is a fast learner and has a keen perception, а quickness of the mind. He could become a very good herder, if he wanted to. But every morning his father has



Photo 2: Nomad women craft together a saddle in the Ahnet mountains, Algeria (© Anja Fischer, 2006)

to wake him up by shouting at him. He often palms his father off with glib excuses like a headache. He cannot be bothered to milk the dromedaries in the morning as he hung out with other young people in the camp for the whole night. Often, while other young men have already finished milking, Mohamed was still lying under his blanket. *Tugey (refusing)* is a term used frequently for the characterisation of a person, livestock or item (Spittler 1990: 195). Even though, Mohamed would have

<sup>&</sup>lt;sup>9</sup> The name is a pseudonym.

18 316 Anja Fischer

had the potential to be an excellent expert in nomadism, he recently quit living in the desert and chose to live in the town.

A bad herder is one who sleeps under a tree the whole day or travels to a settlement for a chat instead of taking care of the dromedary herd (Spittler 1998: 252). He might have the qualifications to be a good herder, but he is not motivated enough. A 'slacker' often does not even know the preferences, the numbers of teeth or the age of his dromedaries (Spittler 1998: 252). Even if someone has the mind and the potential skills to be an expert, when he or she does not have the motivation and endurance to practice and improve their knowledge, he or she will hardly become and be seen as an expert in nomadism.

# The ethic of an expert

Among a group of nomads, who are considered 'equal/alike', women as well as men avoid any kind of service for each other. Maybe they are too proud to provide any service for the neighbours; probably they do not want to be like an *akli (slave)* (Fischer 2014). In early times, some Tuareg families had slaves who worked with the livestock and in the household. Nomads do not accept money for their expertise. In this sense, they express no deep service ethic. They are self-employed, they work independently and they want to stay independent in the camp as well.

Some Kel Ahnet women have an elaborated medical knowledge about livestock diseases. If a neighbour would ask the expert she probably would give helpful advice. People in other societies would probably pay a lot of money for the advice of an expert. A vet would get adequate payment for his or her non-physical work. Among nomads, the expert would not get a 'gift/fee' for his or her advice. An expert who provides physical expertise in form of a helpful hand e.g. for a saddle building receives a gift in return. In a town, a Kel Ahnet nomad would likely expect a 'gift' for good advice for an Arab retailer who has a problem with his livestock. The specialized knowledge on goat of some Kel Ahnet women is highly demanded and could be of good value. The knowledge or expertise of some expert women e.g. how to store and cool down milk in the desert can be worldwide of great value .

If a person, e.g. in Europe, acquires expertise by getting formal education including graduation, then the person also achieves prestige and a higher status. How do nomads become experts if there is no formal education system in place? Tuareg children do not count as full-value workers in Tuareg society, because they still have to acquire their full capacity and mind. Children do not learn by being lectured, but they learn by doing, via trial and error (Klute 1996; Spittler 1998: 244). Adults normally do not explain things, but the children have to watch them to learn how to do it. There is no system of apprenticeships like there is among *inadan* (craftsmen).

But the Kel Ahnet have different work ranks. Children are not regarded as full workers, but as servants. The hired herders from another Tuareg group have a very low position even if they are good and hard workers. Some of them are experts in a special field. But even a slacker who is a Kel Ahnet has a higher position than hired herders. Then there are 'normal' workers, the good, engaged worker and the experts. Even a poor person can be an expert (Klute 1992b: 182). Nuna is not poor but she is also not the leading woman in the camp. Hence a highly qualified expert is not automatically the leader, and sometimes does not have a high status in the social group.

Furthermore, the hired qualified herder is sometimes treated like a servant. He has to have a good work ethic; otherwise, he will be replaced quite quickly. Even child has to do whatever the parents demand or else he or she will be sanctioned. Married nomads lead their own household, they do not provide services for anybody in the camp. Everybody, even the experts, can be criticised or lauded for their work by the group. Women can be experts in more than one category.

# The 'luck' of an expert

In our days the dromedary is a highly prestigious animal while goats carry less - if any – prestige (Fischer 2012c). To a nomad a beautiful white riding-dromedary can be like a 'red Ferrari' to a European man (Fischer 2012c). Tuareg cannot make their living only by breeding dromedaries, they do not usually eat dromedary meat and they cannot produce butter or cheese out of dromedary milk. Dromedaries are a kind of investment for the nomads. Instead, the goats are like a 'living larder' (Dahl 1987: 271). The goats were the most important currency before the colonialization (Nicolaisen 1954: 73). And before the introduction of the dromedaries, the Tuareg only bred goats. In these times, goats carried much more prestige. The whole group of goat breeders even call themselves Kel Ulli (people of the goats). The term for goatherd is called ehere in Tamahaq language, which also means currency as well as luck (Nicolaisen 1954: 73). In that time, work duties were probably quite similar to the duties today. The goats are the domain of the women. Men had presumably less work duties without dromedaries, children pastured the herds and women managed the shelter, the childcare, the nutrition, and the milk economy. At that time as well as today there must have been many female experts among the Tuareg nomads. The 'gift' for an expert was and is a part of the goatherd ehere, and hence a part of the luck.

# 20 318

### Anja Fischer

### Conclusion

The motivation can make up the difference between a good and a bad herder (Spittler 1998). A highly motivated worker is not always an expert. An expert in nomadism has to have at least a particular knowledge or skill, a willingness and endurance to work in the desert. Every camp has a male and a female leader. But the leading woman is not always the best among the expert woman in the camp. As seen, Nuna is often the best in the camp but not the leader of the group. Expert woman are well respected, they have an advantage due to e.g. the professional management of their business, but they do not sell their expertise (like experts in Europe often do). Women as well as men avoid providing services for people in their group. To provide services to others, like children and hired herders do, could be a kind of 'degradation' for an adult in the camp. But an expert expects gifts for their expertise in form of a yeanling. Women work more and in more fields then men do in the mobile livestock economy. "In other words, for a pastoral household to be viable there must be wife to carry out key tasks." (Blench 2001: 42)

Many women are also multitask experts. For example, a woman often makes tea, churns butter, takes care of the baby and supervises the milking, the children and her herd in the morning. What does it mean for a nomad woman to be an expert? Being an expert does not automatically make the woman belong to the elite among Kel Ahnet nomads. It depends on what the experts makes out of her expertise. An expert in castration can be (and probably stay) poor (Klute 1982b: 182). An expert in the milk economy can make profit through professional, more qualified actions (Fischer 2017b). If she manages her business profitably and better than other women do, then a family can gain a higher status in the group and a better standard of living.

Children and young people are not being seen as 'full' workers, but as servants. Hence, only adults are experts. Experts are often married or widowed. Elderly women are not automatically seen as wise or expert. If a woman is an expert in a particular field, every Kel Ahnet knows that. As a result, a woman can receive social recognition. Young women as well as young men with a clear mind, talent and diligence, are valued more than beautiful, but silly girls or boys when it comes to their position at the 'wedding market'. A young nomad knows that a competent and qualified wife or husband is an advantage in order to start his or her own livestock business in the Sahara desert. A woman who is good at the mobile goat business is often also an expert in several fields e.g. the management, the milk processing, the transportation, the weather conditions, the desert flora, the stable and dwelling construction, etc. It would be interesting to analyse the extent of the burden and stress placed on the female livestock managers as well as how they are handling it. However, in my opinion the expert women of the Kel Ahnet nomads show an enormous potential and expertise that can even worldwide be useful.

### References

Badi, D. 2012. Les Touaregs du Tassili n Ajjer. Alger: Ministère de la Culture.

- Beck, K. 1996. Ethnologische Arbeitsforschung in Bayreuth. In K. Beck / G. Spittler (eds.): *Arbeit in Afrika*. Hamburg: Lit-Verlag, 357-374.
- Beck, K. & G. Klute 1991. Hirtenarbeit in der Ethnologie. Zeitschrift f
  ür Ethnologie 116, 91-124.
- Blench, R. 2001. You can't go home again. Pastoralism in the New Millennium. Overseas Development Institute Report for the Food and Agriculture Organization of the United Nations. London: ODI.
- Bernus, E. 1990. Dates, dromedaries, and drought. Diversification in Tuareg pastoral Systems. In J. Galaty / D. Johnston (eds.): *The World of pastoralism*. New York: Guilford, 149-176.
- Bourgeot, A. 1987. The Twareg women of Ahaggar and the creation of value. *Ethnos* 1/2, 103-119.
- Casajus, D. 1987. La tente dans la solitude. La société et les morts chez les Touaregs Kel Ferwan. Cambridge: Cambridge University Press.
- Chatty, D. 2006. Introduction. In D. Chatty (ed.): Nomadic societies in the Middle East and North Africa. Entering the 21<sup>st</sup> century. Leiden/Boston: Brill, 1-32.
- Claudot-Hawad, H. 1993. La conquête du 'vide' ou la nécessité d'être Nomade. In H. Claudot-Hawad (ed.): *Les Touaregs. Portrait en fragments*. Aix-en-Provence: Edisud, 45-67.
- Dahl, G. 1987. Women in pastoral production. Some theoretical notes on roles and resources. *Ethnos* 1/2, 247-279.
- Dardel, C., L. Kergoat, P. Hiernaux, E. Mougin, M. Grippa & C.J. Tucker. 2014. Regreening Sahel. 30 years of remote sensing data and field observations (Mali, Niger). *Remote Sensing of Environment* 140, 350-364.
- Félice-Katz, J. de 1980. Analyse éco-énergétique d'un élevage nomade (Touareg) au Niger, dans la région de l'Azawak. *Annales de Géographie*, 57-73.
- Fischer, A. 2008. Nomaden der Sahara. Handeln in Extremen. Berlin: Reimer.

—. 2010. Research and nomads in the age of globalization. In A. Fischer / I. Kohl (eds.): *Tuareg society within a globalized world*. London: Tauris, 11-22.

- 2012a. The Saharan Dromedary as a Sign, The Prominence of Dromedaries among the Nomadic Imuhar Society in the Algerian Desert. In: E-M. Knoll / P. Burger (eds.): *Camels in Asia and North Africa. Interdisciplinary Perspectives on their Past and Present Significance.* Wien: OEAW-Verlag, 193-198.
- —. 2012b. Sprechkunst der Tuareg, Interaktion und Soziabilität bei Saharanomaden. Berlin: Reimer.
- 2012c. Mobilität in der Sahara, Tuareg Nomaden und ihre Reitkamele in der algerischen Wüste. Mitteilungen der anthropologischen Gesellschaft in Wien 142, 171-184.
- —. 2014. Herden ohne Hirten, Diversifizierung, Flexibilität und Reduktion der Arbeit bei Tuareg-Nomaden in Süd-Algerien. *Mitteilungen der* anthropologischen Gesellschaft in Wien 144, 337-352.
- ——. 2017a. Working in the Desert, The Significance of Labour Performances among Tuareg Nomads in the Algerian Sahara. *Anthropos* 112, 574-583.
- —. 2017b. Milch Mittel zum gemeinsamen Leben. Soziale Komponenten der Milchökonomie bei Imuhar Nomaden in der Südalgerischen Zentralsahara. *Mitteilungen der anthropologischen Gesellschaft in Wien* 147, 315-334.
- 2018. Sustainable Living in the Central Sahara Desert. In F. Jacob (ed.): *The Palgrave International Handbook of Desert Studies*, New York: Palgrave, xxxxxx. (in print)
- Foucauld, Ch. de 1951-52. *Dictionnaire Touareg-Français, Dialecte de l'Ahaggar*. Paris: Imprimerie Nationale.
- Holtzman, J. 2002. Politics and Gastropolitics. Gender and the Power of Food in Two African Pastoralist Societies. *Journal of the Royal Anthropological Institute* 8, 259-278.
- Keenan, J. 2004. The Lesser Gods of the Sahara, Social Change and Contested Terrain amongst the Tuareg of Algeria. London: Cass.
- Klute, G. 1992a. Le travail chez les Kel-Adagh. *Journal des Africanistes* 62, 200-205.

——. 1992b. *Die schwerste Arbeit der Welt. Alltag von Tuareg-Nomaden*. München: Trickster.

—. 1996. Kinderarbeit bei Nomaden. In K. Beck / G. Spittler (eds.): Arbeit in Afrika. Hamburg: Lit-Verlag, 209-223.

- ——. 2013. Tuareg-Aufstand in der Wüste. Ein Beitrag zur Anthropologie der Gewalt und des Krieges. Cologne: Köppe.
- Kohl, I. 2009. Beautiful Modern Nomads, Bordercrossing Tuareg between Niger, Algeria and Libya. Berlin: Reimer.
- Musch, T. 2012. The Transnational Choice, Young Tuareg Traders between Niger and Nigeria. In H.-P. Hahn / K. Kastner (eds.): Urban Life-Worlds in Motion. Piscataway: Transaction Publishers, 157-171.
- Nicolaisen, J. 1954. Some Aspects of the Problem of Nomadic Cattle Breeding among the Tuareg of the Central Sahara. *Geografisk Tidsskrift* 53, 62-105.
- Nicolaisen, J. 1963. *Ecology and Culture of the Pastoral Tuareg with Particular Reference to the Tuareg of Ahaggar and Ayr*. Copenhagen: National Museum of Denmark.
- Nicolaisen, J. & I. Nicolaisen 1997. *The Pastoral Tuareg. Ecology, Culture and Society*. Copenhagen: National Museum of Denmark.
- Oxby, C. 1987. Women Unveiled, Class and Gender among Kel Ferwan Twareg (Niger). *Ethnos* 1-2, 119-135.
- Ritter, H. 2009. *Wörterbuch zur Sprache und Kultur der Twareg II, Deutsch-Twareg.* Wiesbaden: Harrassowitz.
- Salzman, P.C. 2004. *Pastoralists, Equality, Hierarchy, and the State*. Boulder: Westview Press.
- Scholz, F. 1995. Nomadismus. Theorie und Wandel einer sozio-ökologischen Kulturweise. Stuttgart: Steiner.
- Scholze, M. 2004. Wir sind moderne Nomaden. In K. Beck / T. Förster / H.P. Hahn (eds.): Blick nach vorn. Festgabe für Gerd Spittler zum 65. Geburtstag. Cologne: Köppe, 200-209.
- Smith, S. 1978. The Environmental Adaption of Nomads in the West African Sahel. A Key to Understanding Prehistoric Pastoralists. In W. Weissleder (ed.): *The No-madic Alternative*. Paris: Mouton, 75-96.
- Spittler, G. 1989. Handeln in einer Hungerkrise. Tuaregnomaden und die große Dürre von 1984. Opladen: Westdeutscher Verlag.
- —. 1990. La notion de travail chez les Kel Ewey. Revue du Monde Musulman et de la Méditerranée 57, 189-198.

### Anja Fischer

- —. 1991. Armut, Mangel und einfache Bedürfnisse. Zeitschrift für Ethnologie 116, 65-89.
- —. 1994. The Desert, the Wild, and Civilization as seen by the Kel Ewey. In Th. Bargatzky / R. Kuschel (eds.): *The Invention of Nature*. Frankfurt/Main: Lang, 103-124.
- ——. 1996. Ziegenhüten. In K. Beck / G. Spittler (eds.) *Arbeit in Afrika*. Hamburg: Lit-Verlag, 179-193.
- ——. 1998. Hirtenarbeit. Die Welt der Kamelhirten und Ziegenhirtinnen von Timia. Cologne: Köppe.
- 2001a. Le berger et la solitude. In P.S. Diop Samba / H.-J. Lüsebrink (eds.): Littératures et sociétés Africaines. Regards comparatistes et perspectives interculturelles. Tübingen: Narr, 219-228.
- —. 2001b. Teilnehmende Beobachtung als Dichte Teilnahme. Zeitschrift für Ethnologie 126, 1-25.
- ——. 2016. Anthropologie der Arbeit, Ein ethnographischer Vergleich. Wiesbaden: Springer.
- Swift, J. 1981. Labour and Subsistence in a Pastoral Economy. In R. Chambers / R. Longhurst / A. Pacey (eds.): Seasonal Dimensions to Rural Poverty. London: Pinter, 80-87.