

Honey and Beekeeping among the Okiek¹ of Mariashoni, Mau Forest Escarpment, Nakuru District, Kenya²⁻³.

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SOMMARIO

Gli Okiek (Nilotico meridionale - Kalenjin) sono un gruppo di cacciatori-raccoglitori stanziati negli altipiani del Mau Forest Escarpment in Kenya. Fin dall'antichità le loro attività principali sono state la caccia e la raccolta, in special modo quella del miele. Dopo aver rappresentato per secoli il bene di scambio più prezioso con le vicine popolazioni di agricoltori e pastori Nandi e Maasai di cui gli Okiek erano definiti *Dorobo*, ovvero *servitori*, il miele rimane a tutt'oggi l'elemento nutrizionale più ricco della loro dieta. Nel lontano 1955 Huntingford scriveva che il miele per gli Okiek rappresentava qualcosa di sacro, esattamente come il latte di vacca per i Nandi ed altri gruppi pastorali nilotici. Tracce di questo valore sacro si ritrovano ancora oggi nella cultura materiale degli Okiek legata alla raccolta e al consumo (domestico e rituale) del miele. In questo articolo, basato su dati raccolti durante una ricerca sul campo nella regione di Mariashoni tra gennaio e febbraio 2013, cercherò di dare conto dei saperi tecnici, linguistici e culturali legati alle attività dell'apicoltura tra gli Okiek. In breve tratterò della conoscenza delle api e dei loro cicli vitali, del valore del miele nelle attività quotidiane, delle tecniche di costruzione delle arnie tradizionali e delle tecniche di raccolta e conservazione del miele. L'articolo è accompagnato da un lessico culturale e da una serie di tavole illustrative.

Keywords: *Okiek, traditional beekeeping, material culture, linguistic anthropology, Kenya*
ISO 639-3: oki; kln, niq, sgc, mas, kik.

1. Introduction

The region of Mariashoni⁴ in the Mau Forest Escarpment, North-West to the famous Nakuru Lake in Western Kenya, and part of the impressive Mau Forests Complex, is a green hilly highland, laying 1800-3000 m above the sea level.

As it is stated in an official document by the Interim Coordinating Secretariat of the Office of the Prime Minister of Kenya dated at November, 2nd, 2009, "*the Mau Forests Complex is the largest of the five "Water towers" of Kenya*" and "*it forms*

¹ I use here the more correct form, according to the phonological rules of the language (at least in the dialect of Mariashoni). Alternate names, according to Ethnologue, are Ogiek, Akiek, Akie, Kinare, "Ndorobo" (pej.). Ref. www.ethnologue.com/language/oki

² The fieldwork for this paper has been funded by Manitese and the Province of Bolzano (Italy) in collaboration with Ethnorêma. It has been done in the months of January-February 2013 in the region of Mariashoni. The collection of lexical and cultural data proceeded through interviews with single specialists or with selected groups of old practitioners of the region. The location visited were Mariashoni, Molem, Kaprop, Kiptungo and Ndoswa.

³ The researches for this paper constitute the basis for following missions on the field which will be taken in charge by the program "ATrA - Linguistic and Cultural zones of Transition in Africa" funded by the EU through the Italian Ministry of Universities and Research in the framework of FIRB 2012.

⁴ Table 1, picture 1.

part of the upper catchments of all (but one) main rivers on the west side of the Rift Valley”, providing “water to six major lakes, i.e. Victoria, Turkana, Baringo, Naivasha, Nakuru and Natron”⁵.

Today the forest has an extension of 273.300 ha. There are no sure data about the rhythm of degradation of the Mau original habitat⁶, but it is estimated that 1/3 of it, i.e. 110.000 to 120.000 hectares⁷, has been lost in the last two centuries due to savage (also illegal) deforestation, climate change, drought and conversion of forestland into settlements. The latter seems to be the most dangerous factor for the forest survival, if it is true that only in 2001 there have been excisions of forest reserves for new settlements for a total of 61.587 ha, what allowed for the realization of an estimated number of 27,523 new households⁸.

Once inhabited only by Okiek semi-nomad hunters⁹ and gatherers tribes who lived in the forest and on the forest, in an obviously eco-compatible manner, the nowadays deforested areas host a number of communities of Kikuyu farmers and Kipsigis or Nandi herders, who contribute to the acceleration of the disruption of the original forest cover and, inevitably, of the Okiek natural setting. Due to this unfavorable situation, since the beginning of 1900, the Okiek have started to modify their traditional way of life, opening themselves to the introduction of sheep farming and other agricultural economic activities for food production¹⁰.

In his article of 1908, Dundas already identified the process of forest destruction with the Kikuyu struggle for new lands for their crops, and at the same time he imputed to it the death of the original inhabitants of the region, what fortunately we now know did not actually happen.

Dundas wrote: *“If the Kikuyu had to live and increase they had to cultivate the ground, and to do so they were obliged to destroy the forests. The very existence, however, of the Dorobo depended on the preservation of the forests, and hence arose a struggle for survival, which allowed of no compromise and could have but one end. In an incredibly short time the great primeval forest, the home of the Dorobo, were destroyed, and with them this interesting people ceased to exist as a tribe”*.

It must be noticed that the word *Dorobo* could be quite confusing. It has its origins in the Maasai noun *Il-Torobo*, which derives in its turn from the adjective *dorop*, which literally means “short”, and probably was used referring to the commonest physical appearance of the forest people.

In East Africa, the term *dorobo* was (and still it continues to be) used as a pejorative *“for several hunter or forest groups that are not linguistically related (El Molo, Yaaku, Okiek, Omotik, Aasáx)”¹¹.*

As Kenny (1981: 477) puts it *“the essence of the Dorobo’s position is that they engage in economically symbiotic activities with regard to local farmers and herders, while retaining their social marginality as people of the bush”*, and therefore it is obvious that we cannot think at the word *Dorobo* as an ethnic name. No one of the H/G groups

⁵ INTERIM COORDINATING SECRETARIAT (2009), *FAQ - importance* p. 1.

⁶ Table 1, picture 2.

⁷ INTERIM COORDINATING SECRETARIAT (2009), *FAQ - threats & impacts*, p. 2.

⁸ INTERIM COORDINATING SECRETARIAT (2009), *FAQ - settlements*, p. 4.

⁹ Table 2, picture 1. From the next occurrence, the expression “hunters and gatherers” will be abbreviated in H/G.

¹⁰ On this point, see above all HUNTINGFORD, G. W. B. (1955).

¹¹ www.ethnologue.com/language/oki

of Kenya in fact define itself *dorobo*, which is an appellative used by their pastoralist and agriculturalist neighbors.

Be it as it may, concerning the region of the Mau forests, Huntingford (1929: 335) wrote: “*The Dorōbo call themselves Okiot, pl. Okiek (...) by which name they are known to the Nandi (...) People calling themselves Okiek are found in various part of Kenya Colony, in forest regions (...)*”.

We can thus be sure that with the word *dorobo* Dundas referred without any doubt to the Okiek, who were actually the only H/G group living in the Mau forests at his times.

To be honest, it must be added that some Kikuyu traditions refer also to another H/G tribe which was said to share the territory with the Okiek. These people were called the Agumba. What is pivotal in our tentative of identification is anyway that these Agumba were said to live and hunt in the plains, while the forests remained the undiscussed domain of the Okiek (Dundas 1908: 138; Distefano 1990: 47 and Kenyatta 1990: 57-58).

Language is another burning issue regarding both the identification of the *Dorobo* tribes and the collocation of the Okiek in history.

Today the Okiek speak a Kalenjin (Nilotic - Southern) language, very close to Nandi¹² and they live in a symbiotic economic relationship with their Nilotic neighbors, be they Nandi, Kipsigis or Maasai, according to the region they live in¹³, which also allows for interethnic marriages, in which brides are exchanged in both directions¹⁴.

Looking only at these linguistic and social factors, we should thus think that the Okiek belong in fact to the Nilotic ethnic mosaic and that they first came to Kenya following the same migration waves as their pastoralist counterpart.

There are some scholars who have even proposed to consider all the *Dorobo* tribes (and therefore also the Okiek) not as independent ethnic groups, but as scattered ex-farmer or herder groups who had fallen into disgrace due to drought, famine, disease or other physical adversities (see for example Kenny 1981 and van Zwanenberg 1976) which forced them to turn into hunters and gatherers for their survival. This idea is however quite simplistic and as Harvey puts it: “*there are reasonable arguments that the similarities often seen between hunters and gatherers and surrounding peoples derive not from prior membership in those groups but from a positive adaptation to the political and economic circumstances in which they find themselves*”¹⁵. In addition to this, it is important to underline a fact which today is accepted by an important number of historians: East Africa, before the colonization era, which started significantly only in the XIX century, was characterized by an extreme ecological diversity, which “*produced a great variety of ecological niches, occupied by peoples who were themselves ethnically diverse with sharply contrasting socioeconomic*

¹² HUNTINGFORD, G. W. B. (1929: 336) states: “*The possession of a Nandi dialect seems to be one of the criteria by which true Dorōbo can be distinguished*”. For “true Dorōbo” he obviously referred to the Okiek.

¹³ HUNTINGFORD, G. W. B. (1929: 349): “*The Dorōbo give the Nandi baskets, dressed skins, and bows in exchange for ironwork, tobacco, pottery, beads and other necessities which they cannot produce themselves*”.

¹⁴ HUNTINGFORD, G. W. B. (1951: 48): “*Circumstances are forcing Dorobo to marry Nandi women to a greater extent than formerly, and Nandi are also, unreasonable as it may seem, marrying Dorobo women (...). Of 18 recorded marriages of Dorobo with Nandi and other tribes (...) 5 were of Dorobo with Nandi Women (...) 10 were of Dorobo women with Nandi men*”. During my stay in Mariashoni, in the months of January-February 2013, I had a clear confirmation of this possibility in many interviews with old Okiek women.

¹⁵ HARVEY, Steven (1976: 23).

structures”, what “promoted a high degree of integration, mobility and cooperation which gave rise to the proliferation of local networks of exchange”¹⁶. All this has been possible because the region was very scarcely inhabited and because all the human groups living there were small in number, not highly structured and basically interested rather in economical stability than in political supremacy. In such a situation it is clear that identity was just a matter of interaction with the physical and social environment and that language could easily become a mere tool for daily exchanges, which could be abandoned in any moment, when the necessity was urgent to change economic panorama, mode of production and / or socio-economic partners (on this point of Waller 1985).

In my opinion the interactions between Dorobo tribes (read Okiek) and their farmer neighbors (read Nandi, Maasai or Kipsigis) cannot but be read under this light and with respect to this I find illuminating the following passage by Huntingford: “*The Dorobo*¹⁷ are a hunting people who have been forced to take up agriculture, and at the same time are in process of acquiring a small amount of live stock. A great deal of their culture and most of their language have been borrowed from the Nandi; but their habits and mental characteristics are their own”.

What language did the Okiek speak before assuming their current Nilotic - Nandi dialect (as the Okiek is many times defined by Huntingford and as the first data I collected on the field in January-February 2013 seem to confirm) is still an open and very intriguing issue, which however I suspect very difficult to deal with, since we do not dispose of historical recordings and the language has come to us being transmitted just orally from generation to generation.

Anyway, as it is attested in Distefano 1990, there are some - fragile - traces which could let us think of a common Khoisan ascendance of either the Dahalo (today a Southern-Cushitic language) and the Okiek. The Dahalo preserves in fact some real Khoisan words and the undoubtedly Khoisan click sounds, but in Okiek the author admits to have found a unique word lexically similar to an eventual Khoisan original, and he actually reports it: “**lan- (horn), which can tentatively be attributed to Khoisan (*tiana)*”¹⁸. I argue that only future and very deep archaeological and linguistic investigations could maybe bring to the light the true story of the very evolution of the region in terms of mixing, contact and superposition of determined human groups and of their cultures.

Be it as it may, according either to the oral traditions of Okiek's current neighbors, as reported by many eminent scholars, and to the Okiek's own traditional tales, there should be no doubt on the fact that the Okiek and nobody else were the first inhabitants of the Mau Forests complex.

Dundas for example (1908:136) opens his article on the Origin and History of the Kikuyu and Dorobo Tribes, saying that: “*The earliest inhabitants of the country now occupied by the Kikuyu of whom any reliable information is obtainable were a people who call themselves the Okiek*”. Huntingford (1929: 336-337), citing Hollis (1903), writes: “*Mâsae and Nandi traditions point to the Dorōbo having been found by them where they are now, when they first came into this part of eastern Africa; in the Masâe*

¹⁶ WALLER, Richard (1985: 351).

¹⁷ Read “Okiek” - HUNTINGFORD, G. W. B. (1951: 8).

¹⁸ DISTEFANO, John (1990: 44).

story called “*Naiterukop*” (*Beginner of earth*) there were originally three things on earth - an elephant, a snake and a *Dorōbo*; and in the Nandi story “*Tapand’ap emet*” (*The beginning of the earth*) God found three things on earth - an elephant, the thunder and a *Dorōbo*. The *Dorōbo* tradition that “we have always lived here” seems to confirm these stories”. Kenyatta (1990) sustains that the first inhabitants of the region now hosting the Kikuyu, were a H/G people called *Gumba*. These *Gumba* were short like the Pygmy and according to Kenyatta, they disappeared just after the arrival of the Kikuyu, living their place to another group, called *Dorobo* or *Aathi*. These *Dorobo* or *Aathi* were taller than the *Gumba*, spoke a language close to Kikuyu, and had a very friendly attitude towards them¹⁹. The term *Aathi*, which is not listed in Ethnologue, cannot be but another version of the current *Okiek*.

All this given and considered we must admit finally that the Okiek are Okiek not because they speak Okiek, which is most likely a Kalenjin *passpartout* used for inter-ethnic communication with the pastoralist tribes they lived in a symbiotic relationship with, but rather that they are Okiek because they have maintained the traditional cultural traits of original Okiek H/G (whoever they were) living in the Mau forests prior to the immigrations of the Nilotic and Bantu peoples, who today are pervasive in the region.

Old Joseph Jemain²⁰, one of my elder informants of Mariashoni, described to me the original Okiek in this way:

“*en óteβét aβ ogiegi... ogiegi kì:téβun en tímðò.*
Mð mí wákàti nì yì:gós ogiegi γò tñàm jémì tìritá.
ómðitwag^{gh} kà:βá ogiegi kò:γó mí kó:mè^{vh}.
Ogiegi kò: kì:niyíómì kò: kó:mè^{gh} ay pí:ndò.
en óteβét ne juan, kò:gí kì:pñé tñínət keñ tímve^{vh}.
kò:gí ηò mí tímðò ogieg tñú kò:gí kì:ñen kì:lá gáità tímðò (juan) kì:lá gáità
kò:gítegeme
ane juan kò:gí kó:mè^{vh}.
Kwóì nua kà:tín nèγó kó:mè^{gh} kò:gíñèn óròr^{vh} tññ kì: mí séhemuisié^{gh} tñé βúryèn.
kò:gíuzèz kò:βá séhemù ηélé kòm fanu séhemuisié^{gh} tñú púr(i)gèn kò:zú néyì kúri
tzá:βò.
Kò:nómùnén ηélé móisì wə Januar, móisì wa pílim, móisì wa tá:tù, móisì wa íné,
kò:βá kò:rérte kó:mè^{vh} tñú^{gh}.
en iepurigez móisì wa tá:nà kò:ndóv póisíon^{ñh} érièt negaitet”.

“*The Okiek's way of life... Okiek lived in the forest*
No one among the Okiek had ever liked open spaces.
Okiek's food was honey.
The Okiek used to eat honey and meat.
In their way of life, they had divided the forestlands among their clans.
When they still lived in the forest, they used to know which clans had the rights on
which part of the forest,
their life depended on honey.

¹⁹ Cf KENYATTA, Jomo (1990: 57-59).

²⁰ Table 2, picture 2.

In those times, in which honey was so important, they knew which places were warmer in which season.

So, they moved, they settled in those warm places, leaving the cold open spaces. they went, let's say in the month of January, the second month, the third month, the fourth month...

They went to collect their honey

In the 5th month, which was the warmest, they used to leave the elders in a fresh area..."

Honey was thus the principal concern in Okiek lives. And of course it was the Okiek's first product for barter. Still today its value is enormous, and for this reason the project of ecofarming for the Okiek community of Mariashoni, funded by the Italian Province of Bolzano, together with Manitese, NECOFA, a Kenyan NGO, and Ethnorêma²¹, had as its priority the promotion of a mixed traditional-modern way of doing beekeeping. This paper is fruit of the ethno-linguistic research promoted in the framework of this project.

2. The Okiek and honey

Honey, *kó:mè^{yh}*²² in Okiek, lays at the centre of Okiek's economic, social and religious life. It represents the most important economic factor, because it has always represented the principal currency of exchange in the barter with neighboring peoples and it is the principal source of energetic food even in times of climatic adversities, famine and drought.

Honey is then the pivot of social life, because Okiek's seasonal migrations happened following the bees and their production and because it was the principal good used for the payment of bridewealths.

Finally honey still seems to be the most precious element in Okiek's (very simple) religious life, being the object of particular mystical respect. Honey in fact could not be managed by everyone and even those who could get in touch with it had to be in some ways ritually pure. Even though today this religious dimension seems to be a little loosened, at least for what concerns the Okiek community of Mariashoni, there are still some evidences of the protective and blessing role of honey in specific ritual performances.

Rose, one of my eldest interlocutors in the location of Kaprop, explained to me, for example, that, before building a new house, the elders of the family perform a private ceremony, pouring some *ró:tí^{yh} áβ kó:mè^{yh}*, a kind of an alcoholic brewed beer of honey, on the ground and praying over it in order to obtain supernatural protection for the household which is going to be formed.

Collins Kimbai, added that the *ró:tí^{yh} áβ kó:mè^{yh}* is used also during the feasts closing the male initiation ceremonies, and that a collateral product of honey (which I suppose should be propolis) is used as a medicine and ritually put on the circumcised penis just after the ritual cut, in order to avoid infections.

In some ways this *ró:tí^{yh} áβ kó:mè^{yh}* must be considered a sacred beverage linked to life. It is in fact used only in rites which celebrate life (marriages, initiations, births),

²¹ www.ethnorema.it/projects/progetto-ogiek

²² Table 3, picture 6.

but it does never appear during funerals. It cannot be drunk by women in their fertile age, because they are thought to spoil it and to invalidate the rite which is being performed. Only very old women, in fact, and just after menopause, can drink it on very special occasions (the marriages or initiations of their sons or daughters for example) and always after having asked for a special permission to the elders.

With respect to this point Huntingford in his article on the Dorobo Economy (1955: 614) wrote: “*Honey is to the Dorobo what milk is to the Nandi. It is semi-sacred and has a high ritual value, in consequence of which certain rules must be observed lest the supply fail. A person must not eat fruit or blood on the same day that he has eaten honey, though he or she may eat meat. After eating honey, bits of the comb must not be left lying on the ground, but must be hidden in the undergrowth*”. I must say that I cannot confirm the validity of this statement today for the Okiek of Mariashoni, who seem not to share these prescriptions.

In the same article Huntingford underlined the relevance of honey in the Dorobo exchanges with the Nandi, reporting some interesting data. The Dorobo (our Okiek) obtained:

1 axe for 1 bagful of honey.

1 arrowhead for a gourd full of honey.

1 bundle of tobacco (about 1lb) for 1 bagful of honey

1/- worth of trade beads for 1 gourd full of honey²³.

In addition to this, in his very interesting article on the passage from hunting to herding in antiquity (the introduction of caprine domestic mammals in the area now inhabited by the Okiek seems to be datable at around 3000 BC), Marean demonstrates that already in the period of Enkapune Ya Muto²⁴ hunters, they concentrated their predation on small wild bovids of the forests, avoiding usually larger (and more dangerous) forest game, such as buffalo, forest hog or elephant and, according to him, “*this may have been due to the rich returns of honey collection, which was a major source of calories for Okiek*”²⁵, what is a hint suggesting not only the remoteness of the cultural / economic habit of honey collection in the region, but also the strategic position of honey, in terms of food and nutrition, for all H/G tribes.

Furthermore there are many evidences in literature on the special value of honey also in much more structured and rich societies than the H/G ones. Dore, in his article “*Etnografia del miele nelle fonti coloniali italiane sull’Eritrea ed Etiopia*” (2009) demonstrates in a very detailed way, how much important was honey in the commercial exchanges between the Saho (Eastern-Cushitic; Saho-Afar) and their neighbors and on the caravan routes and traditional markets of Eritrea and Ethiopia, and at the same time how much high was the colonial interest for such a precious good and its derivatives. All the sources cited by Dore are official documents by Italian

²³ HUNTINGFORD, G. W. B. (1955: 611-612). The text continues: “*The bag used as a measure for honey is the smallest size of kerepet, measuring 7 or 8 ins by 6 1/2 or 7 ins. The gourd is about 10 ins long*”.

²⁴ Enkapune Ya Muto, also known as the Twilight Cave, is a large enclosed rock-shelter located on the Mau Escarpment above the Naivasha basin in the Central Rift Valley of Kenya. It revealed Later Stone Age and Middle Stone Age deposits (cf MAREAN, Curtis 1992: 66-67). The region has historically become part of the Okiek’s territory.

²⁵ MAREAN, Curtis (1992: 123).

colonial officers, who had to become ethnographers due to practical reasons²⁶. From those documents it also results clear, for example, that the wax coming from East Africa was sold also on many European markets. In particular in Great Britain they seemed to appreciate the wax coming from Eritrea and Ethiopia most than the one produced in Somalia and Kenya, for the Ethiopian one was much more white and pure²⁷.

The commerce with European traders and with other exterior markets seem to have converted to beekeeping also peoples who historically were not so much used to it. Among the Ngindo (Bantu) of the Barikiwa district in southern Tanganyika, for example, a people of shifting cultivators²⁸, as it is stated by Crosse-Upcott in his article “*Social Aspects of Ngindo Bee-keeping*”, until the beginning of 1900 “*beekeeping had yet to become a community habit*”, even though “*two of the principal elements in the Ngindo complex, namely Hamba and Ikemba, are rumoured (and confess themselves) to have been pure hunters and collectors almost within living memory (...) They were renowned bee-men*”²⁹. In the 50ies, the author writes that “*Under optimum conditions the seasonal yield of the Barikiwa district alone might easily reach 300 kilogrammes of wax (...) Now, the total export from the Liwale Sultanate are not more than ten times that figure, whereas its population must be fifty times greater than that of Barikiwa*” (Crosse-Upcott 1956: 84). What is particularly interesting on this point is that having kept until the last generation their nature of pure H/G, Okiek never entered these commercial cycles. Their trade in honey has always remained limited to the internal circuit of symbiotic relationships with their pastoralist or farmer neighbors and they did never start to produce wax. If the NECOFA project will reveal successful, all this is destined to change in the next generation.

Among the Okiek, beekeeping, or better honey collection, storage and distribution, is something that belongs to the male domain.

After having been collected, the honey is stored by the elder men in a secret place in the forest, hidden and kept safe from thefts and dangerous pollution caused by a fortuitous contact with ritually impure people.

Being a woman myself I have never had the possibility to visit one of these places in the forest where the community honey is preserved. Anyway I know that each household (which could be composed by a maximum of 30 people, considering the father’s family and two to three families of the father’s sons) used to store its honey in a number of special quite big wooden containers, called *kìsúnò* or *kìsúnùt* (pl. *kìswòth* or *kìsuñùsié^{zh}*)³⁰, which were realized hollowing a trunk. The family *kìswòth* were then under the responsibility of the elders, whose task was deciding how much of the honey had to be brought to the household, when, for which purposes and in which quantity it had to be divided among his wife and the wives of his sons.

²⁶ Cf DORE, Gianni (2009: 52): “*I funzionari e i tecnici coloniali dovevano diventare etnografi per necessità pratica*”.

²⁷ Cf DORE, Gianni (2009: 57): “*L’Inghilterra ne apprezzava la bianchezza e la purezza rispetto a quelle del Kenia e della Somalia*”.

²⁸ Cf CROSSE-UPCOTT, A. R. W. (1956 :83).

²⁹ CROSSE UPCOTT, A. R. W. (1956: 85).

³⁰ According to my informants the first plural form is the original Okiek one, while the second is adapted to Kipsigis.

This habit of storing honey in a secret place in the forest, must have been common also among other H/G tribes in East Africa, if it is true what is reported by Crosse-Upcott (1956: 85) about the Hamba and Ikemba hunters, who were part of the Ngindo complex and who seemed to be “*reputed to know the art of storing honey in primitive ant-burrows vats and camouflaging them so expertly as to deceive the honey-badger himself*”.

Going back to the Okiek, the transportation of honey from the forest to the household, was instead a female task, but only very old women, out of their reproductive cycle, could be appointed of it.

To carry the honey, in their trip from inside the forest to their household, Okiek women used the (*k*)*lèkwélèt* (pl. (*k*)*lèkwélòr^h*), a bag made with vegetal fibers, usually small ropes obtained from the *kwómèrérièt* -?- plant, intertwined with *tè:yát*, i.e. bamboo cords.

Fertile women could handle honey only out of their menstruations, and could use it only for the necessity of their household: food or medicine production, children and elders nutrition.

In a period of normal hunting activity, honey was principally used as a preservative for smoked meat the Okiek used to store (Collins Kimbai, one of my informants from Kiptungo, said to me that the meat of a single buffalo preserved in honey could feed a family of 5 members for a period lasting up to 3 years), while in periods of scarcity of meat, honey was used as a nutritional addition especially for children.

Concerning children, it must be added that Okiek young boys start very soon exercising in hunt, living their first hunting experiences quite as a game. At an average age of three to four years, male children can be seen going around in the forest in small groups of classmates, each one with his small bow and his small arrows, which initially do not have a metal point. When they go in the forest like this they use to eat what they can gather or hunt by themselves and they use to keep a small bag of honey by themselves, which they eat just in case they need energy and they do not find anything else to eat.

Honey is also used, as we have already seen for the preparation of the beer *ró:tì^h áβ kó:mè^h*, used principally in ritual or official clan or family meetings. Another drink, this time non alcoholic and very refreshing, is what the Okiek call *lókómè^h*, which is made of water mixed with honey and a special kind of seeds and which must be drunk in the same day of preparation³¹.

Okiek know no words for the translation of *beekeeping* or *beekeeper*. The two terms *beekeeping* and *beekeepers* contain in fact the idea of *care*. *Beekeeping* activities are aimed at taking care of the bees and of their hives and a *beekeeper* is someone who works for the well-being of his bees. According to the Okiek tradition, however, nobody is actually supposed to take care of his bees. The only work the Okiek usually do for their bees is the production and positioning of the hives on specific trees in the forest, but for the rest, Okiek limit themselves to follow the natural cycles of bees and flowers. Today the Okiek of Mariashoni are sedentary people, but until some 30 years

³¹ Both beverages were already cited in HUNTINGFORD, G. W. B. (1955: 606-607). For the beer however, HUNTINGFORD reported a slightly different name, that is *kumik ap lo*, which literally should mean “honey of water”, and which therefore I think is an incorrect from.

“do you want a riddle?”; “Yes!”... “do you want a riddle?”; “Yes!”... “These girls, they make themselves beauty with pearls...” ... “They are the bees without sting!”

Given that their lives depend principally on the forest and on honey, Okiek have developed a very deep knowledge of bees. They know bees are not all the same. They know that there are different species and that inside these different species bees have a different morphology according to their specific role in their colony. They know that the colony is very highly structured and that the swarm is directed by a queen bee, which is feminine. They know that the hive has its own cycles of production which must be respected, and that there are times in which you can collect honey and periods in which you would better not do it. They know that bees like to live close to water sources and that they suffer from a too cold or a too warm climate. Of course their knowledge derives from a simple observation from the outside, whose origin lays in the mythic times of tradition, and in fact Okiek views are partially different from what we would define as really scientific, but anyway what they know about bees and their lifecycle is enough to grant them an unquestionable skill in dealing with bees and honey.

In this section we will go through this traditional knowledge.

First of all, when asked “what is a bee?” the Okiek simply answer that “a bee is a bee”, firmly refusing the idea to classify it under the label *kàliṅṅát* (pl. *kàliṅṅátth*), “insect”.

A bee is thus something which has a very special status. A bee is just a *sègemiát*.

Besides being the taxonomically generic term, a *sègemiát* (pl. *sègemiátth*) is the common domestic bee (*Apis mellifera*). Apart from it, the Okiek distinguish at least other three types of bee, all of which are thought of as a kind of *sègemiát*.

These other species are: *kósomiát*, *sómḍseriet* (pl. *sómḍserietth*) and *tʃéptìyige* (pl. ?)

Kósomiát (pl. *kósométh* - *Halictus*) is what the Okiek define as the “savage bee”, because it is impossible to domesticate it. It is an earth bee, which makes its hives in holes in the ground. It produces a honey which is much more liquid and sweeter than the common one and which is preferably used as a restorative medicine. Today this bees are rare in the region due to deforestation, but their honey is very highly appreciated and therefore, when an Okiot discovers one of these ground-hives, he keeps it secret to the others.

The other two types of bee, *sómḍseriet* (pl. *sómḍserietth*) and *tʃéptìyige* (pl. ?) are usually translated by the Okiek as “red bees” and “black bees”. Unfortunately I had no means to identify the two corresponding scientific names. Anyway my Okiek informants described the former as very aggressive and producing not very good honey, while the latter were described as not aggressive and with a very good honey.

Huntingford 1955: 615 reported a similar distinction, identifying 4 species, but even though the first two, *sègemiát* and *kósomiát*, correspond either in terms of lexical form or of scientific classification to those I have just described, the other two species he quotes seem to be completely different. He reports in fact the word *Imeik*, corresponding to the scientific species *Omia*. *Omia* are solitary bees “which live in trees and hollow stems of shrubs and make honey”. The second word reported by Huntingford, *Kiptulonik*, corresponds to the scientific name *Chalicodoma*. *Chalicodomas* are mason bees, “which live in cells made of a sort of cement formed

of earth, minute stones, and their own saliva. These are very small bees, which make only a small amount of honey, and are not found in the forest, but in Soiin below the escarpment”.

In this case it is possible that my informants really do not know the insect itself, being that it is endemic in a different habitat, but for what concerns the *Imeik* it should be interesting to know if such a bee has ever existed in the region of Mariashoni, which could be a hint also for botanist and agro-forestal experts to understand the level of degradation of the original ethological population. Further lexical enquiries have thus to be done.

Sègemé^h, that is the domestic bees, are then distinguished according to their role in the colony:

The queen bee is called *ká:mèt aβ sègemé^h*, lit. “mother of bees”. It is thought of as a female and all the *sègemé^h* of her colony are said to be her sons. For this reason I suppose, Okiek think that it is the queen-bee who feeds the brood (*sic!*)³⁵.

For the worker bee, which is seen as a male, Okiek do not have a singular form. Worker bees are the most numerous in a colony, and they are perceived as a plural entity. Not all my informants agreed on their name, even though the majority of them proposed the term *gíβíté:ní^h*, according to some of them the most correct form should be *sè:rse:rí^h*. Huntingford (1955) proposed unfortunately no specific names for the workers, which he simply classified as *sègemé^h*.

The drone is called *gób(v)ríðt* (pl. *gób(v)ríèní^h*) and is obviously seen as a male. The Okiek are aware that drones do not do anything special in the hive and that their task is just mating with the queen-bee. To understand when the hive is full of honey and the colony is ready to give life to a new swarm, the Okiek look under it and if they find dead drones on the ground it means that it is time for harvesting.

Besides these bees, the Okiek identify another kind of specialists, what they call the scout bees: *kà:utáni^h*, *kó:jógi^h* or *sègeí^h*. Also in this case they only know the plural form of the name, because scouts are said to work in groups. Their task is going out looking for flowers and calling the workers to collect the pollen. When it is time for the bees to migrate to a warmer or to a colder place, the scout bees precede the others in order to find a new hive to settle in.

The co-existence of different terms for the same specialization is probably due to the fact that my informants came from all the different locations of the Mariashoni region (which has an extension of about 264 km²) and they could witness for dialectal lexical variations. Huntingford (1955) did not report anything similar.

The Okiek distinguish with specific terms the three stages in the life of a bee, before it becomes an adult insect:

Mà:éni^h aβ sègemíát (*mà:éni^h*, lit. *egg*, has only a plural form in this case) are the eggs of the bee. After the egg stage, the bee becomes an *ísiát* (pl. *ise^h*)³⁶, that is a larva, and finally it transforms itself into a *várvèt* (pl. *váre^h*), i. e. a pupa. The same term for larva in its plural form, i. e. *ise^h*, is used also generically to indicate the brood. Okiek do not have a clear idea anyway of the time that occurs from the one

³⁵ All the hive (larvae, pupae, queen-bee and drones) is fed by the workers.

³⁶ Table 3, picture 6.

stage to the other, or from the egg stage to the adult bee stage³⁷. They also do not know how long lasts the lifecycle of an adult bee (either in terms of days or of months - *sic!*), but they say that the drones live lesser, because the workers kill them when the hive is full, what means that the workers survive³⁸ to them. Apart from this, they finally are aware that the queen-bee can live for more than three or four years. Huntingford (1955: 616) identified the same name, *várè^{yh}*, for what he described as “*young bees, grubs*” but did not report any distinctions of the other two stages (egg and larva).

When asked to describe the morphology, or the physical characteristics of a bee, Okiek use descriptive forms containing names taken from the human, or from other animal bodies. Thus bees have a (human) head, *métit aβ sègemiát*, their body is divided in (human) thorax, *pó:rt(ð) aβ sègemiát*, and abdomen (lit. belly), *mð:ét aβ sègemiát*. They have (human) legs (lit. feet) *ké:liè^{gh} aβ sègemiát*, and (bird) wings *márábù^{yh} aβ sègemiát*. The only two specific non descriptive terms are *kó:té:t* (pl. *kó:tié^h*) for the proboscis and *ré:rì^{yh}* for the sting, which strangely has a plural form.

Let us now have a look at the hive. The Okiek of Mariashoni distinguish lexically the natural beehive from the handmade hive. The name of the natural beehive, which is usually a cave tree or a trunk with natural holes, is *pó:nèt³⁹* (no plural), while the hand made one, a typical log-hive, we are going to describe in the next section, is called *mùingét⁴⁰* (no plural). Interesting enough is that Huntingford (1955: 616) reported for the same hive, which he describes as a honey-barrel, the word *pasanet*, which has no correspondence in my data.

The swarm living in a hive is called (*g*)*iráçrìth*, with a plural form, but when the colony becomes too large Okiek define it as a *tújè:t aβ sègeméth*, i. e. a real “horde” of bees.

Inside the hive there are honeycombs, *pó:γfðt* (pl. *pó:γi^{yh}*). *Pð:γfðt* is the generic term for different kinds of combs, which can be long, short and somewhat rounded or even cross shaped. Each one of the three combs has its specific name. *Kðmdó* (sg. only) is the long one, *kè:nèjué^{gh}* (pl. only) is the short, rounded one, while *sèma:né^{yh}* (pl. only) is the cross comb.

All hives, be they natural or handmade ones, must have some kinds of openings to let the bees in and out. Both kinds of opening are called *pó:nèt* (sg. only). The same word is used for the bigger hole opened at the bottom of the log-hive in order to collect honey. That opening is generally closed with a *kèrvbé:t* (sg. only), which is made of vegetal fibre. We will see it in detail in the next section.

In the hive each bee lives in its own cell. Different kinds of bees live in different kinds of cells and the Okiek are very well aware of it, distinguishing them using different, specific terms. Thus the queen cell is called *kóγàrìót* (pl. *kóγàrì^{yh}*), the drone cell is *kùsúmdò*, while the cell for the worker is called *pð:gít*. What is strange in this

³⁷ BRAIDOTTI, Flavio, Pietro LORENZI (2010: 8; Table 1). The days needed for an egg to become a queen bee are 15. For a worker 20 and for a drone 24.

³⁸ BRAIDOTTI, Flavio, Pietro LORENZI (2010: 8; Table 1). The average life of a worker bee is about 35-45 days, for a drone 50 days, while a bee becomes mature at the age of 2 years and can live up to 5 years.

³⁹ Table 4, picture 7.

⁴⁰ Table 4, picture 8.

terminology is that only the queen cell, which is a single one in each hive, has two different forms, for singular and plural, while the drone and worker cells, which are much more numerous in the hive, seem to have just the singular form. An hypothesis could be that the singular refers to a kind of a collective noun, but the form would go quite contrary to the Okiek habit to use plural forms for non-countable nouns like, for example here, *kó:mè^{yh}*, “honey”.

If the Okiek have proved a quite detailed knowledge of the lifecycle and of the habits of their bees, they have had some *débaclé* in the exact identification of products of the bees.

Concerning concepts as pollen, nectar, propolis, royal jelly or wax, my elder informants in Mariashoni had quite confused ideas. They seemed to agree that the specific terms are 4: *nò:γíth*, *tèmeniét*, *àsae^{yh}* and *vá:è^{yh}* (which must not be confused with the aforementioned *várè^{yh}*, “pupae”), but they definitely disagreed on their meaning and it was impossible for me to understand which label corresponds to which substance.

Nò:γíth was said to be either pollen or royal jelly (?). Given that all my informants agreed that some of this *nò:γíth* is used for the preparation of the ceremonial beer, I dare imagine it is rather royal jelly, than pollen. *Tèmeniét* and *àsae^{yh}* (the first a singular, the second a plural form) have been proposed for the translation of “wax”. My informants said to me that this *tèmeniét* or *àsae^{yh}* is used during the male initiation rite, but they avoided describing to me its actual function. Be it as it may, what I know is that the traditional Okiek seem not to have used *wax* in any other way and until now they have even never commercialized it, so the question remains an open issue. For what concerns propolis they seemed to agree on the word *vá:è^{yh}*. Anyway no informant could describe to me the collocation of these elements in the comb structure. For “nectar” they suggested the term *tá:βtèt* (pl. *tó:βtó^{gh}*), but again it seems quite confusing to me, because the same word is the common form for “flower”.

If the generic word for honey as a food is *kó:mè^{yh}*, the Okiek distinguish then two types of honey as a product of the hive: *nàrò:γth* is the ripe honey still in the comb, which has about a month of maturation, while the eldest one, which can reach one year of age is called *kéldèt aβ kò:γó*, lit. *foot of the elder* (?).

Apart from being aware of what happens to the bees inside and outside their hive, Okiek also know that hives are constantly menaced by external enemies. The most dangerous ones are said to be birds in general, because they like eating bees. In particular, the worst is a small one, with white eyes and grey plumes, which they call the *kìprá:skò* (sg. only)⁴¹.

Ants, *sìjimiét* (pl. *sìji:míth*) are also considered very dangerous, in that they eat bee eggs. Among ants, the most dangerous are said to be the small ones of the cow (?), which they call *táyò:γòth* (pl. only).

In many regions of East Africa honey collectors usually say that they can identify the collocation of a new hive following a bird whose latin name is *cuculus indicator*. It is in fact said that this bird calls out its cry when it finds itself close to a colony of bees. Huntingford (1955: 618) reported that Okiek shared the same belief and that the Okiek

⁴¹ Cited also in HUNTINGFORD, G. W. B. (1955: 618).

name for the bird was *Keceiat*. I discussed this issue with my elder informants in Mariashoni, but no one seemed to know anything about it.

Last but not least, to complete our discourse on the bees and their lifecycle according to the Okiek, here you find the yearly calendar of the bees activities as described to me by the elders of Mariashoni:

- January-February are the months in which the bees migrate where it is colder, in the highlands. In this period the rainy season is just finished and the highlands are full of flowerings. At the beginning of this period, that is just after the rainy season, the mating happens.
- End January-March: these are the months of richest harvesting.
- End March-April: the bees look for a warmer place and some start to migrate towards the lowlands.
- April-July: in these months it is too cold for the bees to move, and outside there is no flourishing. Therefore nothing special happens.
- July-September are said to be the months in which the queen lays eggs.
- September-November (but in any case always) are the months in which, according to the Okiek the workers produce honey.
- During the whole year, especially in the rainy or wet seasons, when honey is “always” present, Okiek beekeepers check the honey production once a month.

This description of the Okiek yearly calendar of the bees’ activities, seems to correspond quite well to the data presented in Carrol (2006: 32-37) about the honey harvesting seasons in different regions of the Mau Forests area.

We have seen that the best harvesting season according to the Okiek of Mariashoni is end January-March. Comparing this information with Carrol (2006: 34) we see that the same is true for the Kakamega forest, where the best honey season lays between December and March).

These data would then place the two ecological niches of the Mau and of the Kakamega forests on the same level in terms of botanical structure and ecosystems, and this is very interesting given the deep degradation of the Mau and, to the contrary, the more protected area of the Kakamega forests.

Data on the harvesting times in the rest of the area are: end September - October for Molo; April-June and October-February for the Nandi hills; March, July and November for the Trans Mara and March-April and September-November for Kirinyaga⁴².

4. Making and placing a new hive. Tools, processes and lexical data⁴³

In East Africa and in particular in Kenya there are different kinds of traditionally handmade beehives. Hives can be made with mud and sticks, with baskets or pots⁴⁴, with bark or wood⁴⁵ or even with mud mixed with cow dung⁴⁶. As every kind of

⁴² CARROL, Thomas (2006: 32-37).

⁴³ For the lexical data contained in this section I am especially grateful to John Ndirito Kipchumba, one of the most skilled hive-maker from the location of Molem.

⁴⁴ CARROL, Thomas (2006: 8-16) reported pictures of all these hives.

⁴⁵ As it is among the Ngindo of southern Tanganyika (CROSSE-UPCOTT A. R. W., 1956:84)

handmade object, a handmade hive is built using the raw materials at disposal in a determined natural context. Being the Okiek forest people, it is obvious that their hives could but be made of the wood of their forests.

The typical Okiek hive is thus the traditional East African log-hive⁴⁷, or *mùingét* in Okiek (singular only), which is around 1,40m long, has a diameter of ca 40cm and is usually placed on very high trees in the forest at an height of about 5 to 10m. Today it is also common to find these hives placed on the fences near the houses, but this is definitely a modern evolution.

When a *mùingét* is placed in a good area and the beekeeper takes good care of it, it can have an average production of about 20kg honey per year, which is really not bad, if we think that the modern Langstroth hive gives up to 40kg, the KTBH (Kenya top bar hive) does not exceed 30kg while the other types (pot hive, basket hive etc.) reach only an average of 10kg⁴⁸.

According to the Okiek tradition, a *mùingét* belongs to the man who builds it and the same is true for the swarm which settles in it. When a man dies, his *mùingét* are distributed among his living sons and the same happens among the Ngindo of southern Tanganyika⁴⁹.

In this section I will describe the processes, the materials and the tools involved in the building of a new *mùingét*.

In the mind of its builder, a *mùingét* is made to last many years. It is supposed to resist to any weather adversities and therefore it must be strong and carefully made. The most preferred woods for the building of a new *mùingét* are *màyó:nçhèt* (cedar tree) or *(ε)sìsó:nèt* (?) because they are harder, but Okiek can sometimes use also the wood of *òvnít* (?), which is softer, but still very reliable.

Unfortunately, for the moment it has been impossible to identify the scientific names of *(ε)sìsó:nèt* and *òvnít* and even in Huntingford 1976 I did not find any correspondence either in Nandi/Dorobo or in Maasai. In addition to this, Huntingford 1955 (p. 617) reported the names of different trees used by the Okiek of his time for making a hive (above all *mocet* and *rerendet*⁵⁰), saying that these woods were preferred because softer and easier to shape.

This information brings us in a *cul-de-sac*: Huntingford's informants in fact considered pivotal a characteristic of the wood, i. e. its *softness*, which is exactly the opposite of what my own interlocutors believe fundamental, i.e. *hardness*. How can the two things go together? How can they be equally and contemporary true? I think that this can be possible at least for one reason: Huntingford indeed did his research among the Okiek in the first half of 1900 and it is possible that the tools the Okiek used at those times and which they obtained from the barter with their Nandi or Maasai neighbors, were not as good as the ones they can rely on today, and therefore their priority was probably slightly different from the current one. It must then be underlined that all my

⁴⁶ As it is for the *qafò* of the Saho described in DORE, Gianni (2009) and VERGARI Moreno and Roberta ZAGO (2009).

⁴⁷ Or barrel-hive according to the terminology adopted by HUNTINGFORD, G. W. B. (1955: 616-617).

⁴⁸ Data taken from BRAIDOTTI Flavio and Pietro LORENZI (2010: 36; table 8).

⁴⁹ On this point cf HUNTINGFORD, G. W. B. (1955) and CROSSE-UPCOTT A. R. W. (1956).

⁵⁰ For the first, *mocet* HUNTINGFORD, G. W. B. (1976) does not give any identification with a latin name, while the second, *rerendet*, should be the *Euphorbia Candelabrum*.

informants agreed on the fact that anyway everybody tended to use an already fallen tree, what they called a “mature cedar” *mḍγḥ:nḍḗt ḥḍḥát*, rather than cutting a new one. On the one hand this is due to the fact that they are aware of the need to preserve what remains of their forest, but on the other hand it is unquestionable that “using a mature cedar is easier and lesser laborious than cutting a lively tree”.

Be it as it may, it is reassuring to know that either today, or at Huntingford’s times “*The entire work of shaping and cutting is done with the axe*”⁵¹, *ḍjué:t* (pl. *ḍjó:nḍ^{gh}*)⁵² in Okiek.

When the right trunk has been found, it is split (*ké:βàt*) in two parts in the longitudinal sense. The next step is cutting the two halves of the future hive for a length of about 140cm. The effective measure of the hive usually corresponds to the height of the hive-maker from his feet to his shoulder.

Once a hive-maker has cut the trunk in these two halves, he must hollow them out (*ké:βàl*), obtaining now the two shells *gèβé:βéruè^{gh}* (sing. *gèβé:βér*) of the future hive.

To hollow out and shape (*ké:βḍtót*) the interior of the two wooden shells, the Okiek use again a small axe *kìsienḍḥót*, with a kind of chisel, *kìsienḍḥót*⁵³ (pl. *kìsienḍḥósiè^{gh}*), on top of a handle, *kùḥúktḍ⁵⁴* (pl. *kùḥúkwè^{gh}*) made of the *kalukḥa:f⁵⁵* wood. Once the interior has been modeled, the hive-maker starts to refine (*ké:ḥḍk*) the external surfaces, taking the old bark away.

At this point the two wooden shells of the future hive are left in a cool place to dry for at least two weeks (or, better, a month).

When the shells are dry, the hive-maker has to pierce the wood, in order to create at least 3 holes per side on each shell. In these holes will pass the small fiber cord through which the two shells will be sewn together in order to give the hive its characteristic log form.

The tool used to pierce the wood is a kind of long pike, called *mèḥḥé:itá⁵⁶* (pl. *mèḥḥé^{gh}*), made red hot on the fire. The thread, *túnḍ:jét* (pl. *túnḍ:jḥ^{gh}*), used to sew the two wooden shells together is made with a special kind of bark, the *ḍmólilít* (pl. *ḍmólilḍsiè^{gh}*). Unfortunately I do not know the scientific name of this *ḍmólilít*, which was also not mentioned either in Huntingford 1955 or in Huntingford 1976. The same thread is eventually used to sew also those small cracks that sometimes happen to break into the dry wooden shells.

Once the two shells have been sewn together, it is time to choose the shell where to make the *pó:nèt* (pl. *pó:nìt^{gh}*), the opening for honey harvesting. The *pó:nèt* is a rectangular hole, about 15-20cm long and 7-8cm wide, which stays at the bottom of the hive, once it is placed on the tree, in order to facilitate the harvesting operation. To make the opening the hive-maker incises (*ké:yàk*) delicately its border on one of the

⁵¹ HUNTINGFORD, G. W. B. (1955: 617).

⁵² Table 5, picture 9.

⁵³ Table 5, picture 9 and 10, and table 6, picture 11.

⁵⁴ Table 6, picture 11.

⁵⁵ Even in this case I cannot say what is the scientific name of the tree, nor was it cited in HUNTINGFORD, G. W. B. (1955) or (1976).

⁵⁶ Table 6, picture 12.

two shells with a small knife, the *ró:twèt* (pl. *ró:tò^{gh}*)⁵⁷, then the cutting is still made with the aforementioned small axe (*kìsiençjít*).

The *pó:nèt⁵⁸* will then be closed with a *kèrvbé:t⁵⁹* (no plural), made of any kind of durable vegetal fibre.

The two ends of the hive are finally made with two circles of the same wood as the shells, where some holes, *kð:ŋ⁶⁰*, are left, or pierced with the *mètfé:ità*, in order to let the bees in and out of the hive, which is now ready to be wrapped in long strings of green bark *mò:rtét* (pl. *mò:r^{rh}*) of cedar tree *təró:kwèt*. These strings of bark has to be at least two palms longer than the log itself, because they must protect the entrance to the hive for the bees. Once these bark strips are dry, they are called *pé:r^{rh}* (sing. *pé:rtét*)⁶¹. To fix the bark strips, the Okiek use a rope, *túnð:jét*, made of *písindá⁶²* (a kind of a liana, whose scientific name I do not know) wrapped around a iron wire core.

Once all these operations have been made, the log-hive is ready to host a swarm of bees, and it is time to carry it in the forest and place it high on a tree.

Not all the trees are good to give home to a log-hive. According to the Okiek the log must be placed at the bifurcation of two strong branches, *sóχðtiát* (pl. *sóχðt^{gh}*). If in the area there are no trees with an appropriate bifurcation, it is made artificially. Also the artificial bifurcation, which is made adding a kind of a long crutch to the original tree, has its proper name, and it is called *téjuðt* (pl. *téjuð^{gh}*). If the log is well placed there is no need to tie it to the tree. Unfortunately I did not ask to my informants which kind of trees are usually chosen for the placement of the hives, but anyway I can say that they are very high trees, which have very few or even no branches near the ground and the same was attested by Huntingford (1955: 618).

Given the very precious value of honey in the Okiek tradition one would expect some of the passages of the making of a new hive to be accompanied by ritual agency, but as far as what I have learnt from my informants and from the elders of the region of Mariashoni this seems actually not to happen.

In section 2, footnote 33, I have already reported that, according to Huntingford (1955: 617), when, at his times, a newly made hive was placed on a tree, the beekeeper made an invocations to the bees, calling them to settle in it and that I have never recorded anything similar regarding the Okiek of Mariashoni. I argue that this invocation, which was pronounced “*in an unnatural, high-pitched tone*”, cannot but be considered as a faint trace of a possibly richer ceremony which could have been performed in ancient times.

In the Ngindo tradition there was a special taboo, which prevented a beekeeper from putting more than one hive on the same tree⁶³. Even though I had no expression of this kind of beliefs from my informants, it is true that also in the region of Mariashoni I never saw a tree hosting more than one log. Maybe in this case the practice is

⁵⁷ Table 7, picture 13.

⁵⁸ Table 7, picture 14.

⁵⁹ Table 8, picture 15.

⁶⁰ Table 8, picture 16.

⁶¹ Table 4, picture 8.

⁶² No correspondence in HUNTINGFORD, G. W. B. (1955) or (1976).

⁶³ CROSSE-UPCOTT A. R. W. (1956: 86).

maintained but the memory of the reason why things are done like that has finally been lost⁶⁴.

5. Harvesting honey. Traditional tools and techniques

After two or three months from the placement of a new hive, Okiek start to check if bees have come to settle in it. If not, nothing special is done and Okiek are confident that it would just be a question of time and patience. If the hive has become the house of a new swarm, people know that some weeks after the blossoming they can start harvesting.

Okiek do not have special clothes for the harvesting operation (*kìòmú kó:mè^{yh}*). Their traditional *àyúrièt aβ (i)ndèrít⁶⁵*, a long mantle made of hyrax skins, was worn high on their head, firmly closed under the chin, in order to avoid being stung on the face.

Before climbing on the tree where the log-hive is placed, the beekeeper prepares the tools he needs for harvesting: a simple shoulder bag, the *mòtogé:t* (pl. *mòtogó^{gh}*), which is made of antelope skin, containing the so-called *kùrógvriét* (pl. *kùrógvri^h*)⁶⁶, a puff of vegetal fibre, no matter if green or dry, whose centre contains some small pieces of cedar tree bark (*sasiát⁶⁷* - no plural)⁶⁸, which he previously has made burning. Concerning the bag, my elder informants underlined that it had to be made with the skin of the alpha male *kwéstà* (no plural) of species like the red duiker, *mindet*, the *pefpenit* or the *mbò:let⁶⁹*, which are two other kinds of small deers, of which however I do not know the scientific name.

I do not know if this was only a question of prestige, or if, also in this case, we are legitimate to see another faint trace of a ritual prescription which has now been forgotten during times.

Be it as it may, on this point Huntingford 1955 did not report anything special.

To make the *kùrógvriét* burning, the Okiek use the ancient method of rubbing one thin stick, called *pínè:t* (no plural)⁷⁰ on top of another, a little bigger one, called *ndàmé:t* (no plural)⁷¹. The *ndàmé:t* is usually made of a soft wood, while the *pínè:t* is always of cedar or anyway of another very dry and hard wood.

Reaching the hive without *kùrógvriét* would be very dangerous for the beekeeper, because the smoke coming out from the puff is the only tool he has to make the bees fly away, preventing them from stinging him. Once he reaches the hive, he first blows some smoke towards the opening. When he is sure that the bees have moved away, he opens the log, taking the *kèrvbé:t* away. Before putting his hand into the hive, he blows again more smoke inside, obliging the bees to keep away from the central part

⁶⁴ The Ngindo of Southern Tanganyika seem for example to have some more rituals and beliefs linked to honey and beekeeping, even though their practices vary very much from clan to clan. On this point see CROSSE-UPCOTT A. R. W. (1956: 96-98).

⁶⁵ Table 9, picture 17.

⁶⁶ No correspondence in HUNTINGFORD, G. W. B. (1976).

⁶⁷ *Idem*.

⁶⁸ Table 9, picture 18 and table 10, picture 20.

⁶⁹ The first one, *mindet*, is cited also in HUNTINGFORD, G. W. B. (1955: 605), but the others are unfortunately not.

⁷⁰ Table 10, picture 19 and table 11, picture 21.

⁷¹ Table 10, picture 19 and table 11, picture 21.

of the log, where the *pó:nèt* is now without its closing. He then checks if the honey is mature. If the brood still contains larvae or pupae he just brings back the *kèrvbé:t* to its initial position, closing the *pó:nèt*, while, if the honey is ready, he collects it and puts it into his *mòtogé:t*.

Once climbed down, he puts the honey in a container made of *kwómèrérièl⁷²* (vegetal fibre obtained from a kind of a liana) intertwined with *tè:yát⁷³* (bamboo fiber).

This kind of container, called *pó:lèit⁷⁴*, is the one commonly made by the Okiek women for storing all kinds preservable food, herb or medical plants.

Now it is up to the beekeeper to decide whether to let an old woman carry the honey directly to the household (if it is only a few and if it is really needed in that moment), or to make her transport it deep into the forest where the elders have stored the *kisúŋò* or *kisúŋùt* (pl. *kiswth* / *kisunùsi^{gh}*), the big container for long-lasting storage.

At home, part of the honey will be kept aside specifically for the children. This honey for the children is preserved inside the women's house in a small bottle-like container, called *pó:lèitth* (pl. *pó:lèitth*), made with other vegetal fibers: the *sèlekwét⁷⁵* (no plural), strengthened with *fâβarâr⁷⁶*.

The skill of the Okiek in handling with bees, especially when harvesting, is really impressive. It is true that, even though they do not have any protective equipment, they rarely are stung by their bees. This could obviously derive from their cultural habits, but in their own discourse on beekeeping, Okiek are usually proud to underline their innate feeling with bees.

Huntingford (1955: 618) wrote for example: “*The Dorobo say that bees know their owners by the smell of their bodies and that for this reason people are stung but little when they take honey from their own barrels (...). People claim also to recognize their own bees*”, and quite the same things have been said to me by many of my informants on the field.

6. Conclusions

The Okiek are one of the most ancient H/G people of Kenya. Unfortunately we do not dispose of much historical or archaeological data about their first settling in the Mau forests complex, but what is sure, at least according to their own oral traditions and to the oral traditions of their actual neighboring farmers or herders groups (Nandi, Kikuyu and Maasai) they were undoubtedly the first inhabitants of the region.

Even though today they speak a Southern Nilotic - Kalenjin language very close to Nandi, they must have had their own language in the past, which is now very difficult, if not impossible, to identify.

The most fascinating theory would indicate a common Khoisan origin for many H/G groups of East Africa⁷⁷, but linguistic research and documentation on H/G languages

⁷² Cited in HUNTINGFORD, G. W. B. (1976: 431). No scientific name. It is the same as Nandi *Cepsanjaniet*.

⁷³ *Arundinaria alpina*, cited in HUNTINGFORD, G. W. B. (1976: 436) with the form *Tekat*

⁷⁴ Table 11, picture 21. and 22.

⁷⁵ No correspondence in HUNTINGFORD, G. W. B. (1976).

⁷⁶ *Idem*.

⁷⁷ Cf DISTEFANO, John (1990).

are still too poor to allow for a credible reconstruction of historical linguistic processes of evolution and adaptation.

Until the fifties of the last century the Okiek, as all other H/G peoples in East Africa, were just described as *Dorobo*, that is “servants”, of the Maasai pastoralists or of the Nandi farmers living close to the Mau forests complex.

Dorobo is a pejorative term, used generically to describe all East African H/G groups living in a symbiotic relationship with their technologically more advanced pastoralist or farmer neighbors.

Apart from Huntingford, who dedicated his studies to the Okiek of the Central Rift, whose counterpart was Nandi, the majority of other scholars until recently have always focussed on those Okiek groups living in the Narok district, in close connection with the Maasai⁷⁸.

This paper concentrates on the Okiek of Mariashoni, Nakuru district.

What emerges from the data I personally collected on the field in the months of January-February 2013 is that the beekeeping tradition of the Okiek of Mariashoni today are very similar to what described by Huntingford in 1955 about the Okiek of the Central Rift.

The Okiek have always lived in the forest and on the forest. They were semi-nomads, and their displacements were determined by the seasonal migrations of bees from the highlands to the lowlands and the reverse. Honey in fact constituted their main source of energetic food and was essential as a nutritional addition for children's and elders' diets in periods of severe famine, drought and other ecological adversities.

This must have been true at least since the later stone age.

The archaeological excavations of the Enkapune Ya Muto cave, demonstrate in fact that it was in that period that H/G living in the region abandoned the hunt of large game, in favor of the easier and less dangerous hunt of small deer, while the introduction of domestic caprine is datable just at around 3000BC. In that period honey collection probably became a widespread habit and therefore the necessity of meat as an energetic food for the local population diminished⁷⁹.

Even though today their original habitat, the Mau Forests complex, is very much reduced due to savage deforestation, climate changes and ecological degradation, the Okiek of Mariashoni, who have started introducing a minimum of agriculture and farming in their economic life only since the first decades of the past century, continue to see hunt and honey collection as pivotal in their lives and in their food and medical tradition.

For this reason the NECOFA, (Network for Ecofarming in Kenya), with the help of Manitese and the Province of Bolzano, has inserted a project on beekeeping in the framework of its multi-sector program of eco-farming⁸⁰ in the region of Mariashoni. The ethno-linguistic researches for this paper have been done on behalf of NECOFA with the main objective of collecting basic data for the preparation of a handbook in

⁷⁸ Cf all the works by KRATZ, Corinne A..

⁷⁹ Cf MAREAN, Curtis (1992).

⁸⁰ Which comprises interventions in the field of agroforestry such as forest reconstruction, tree nursery, gardening etc.

Okiek for those Okiek trainers involved with the constitution of local beekeepers' cooperatives.

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Appendix 1. Short Lexikon of bees and beekeeping

This Lexikon is based on an ethnolinguistic study made between January and February 2013 among the Okiek of Mariashoni, Nakuru District, Mau Forests Complex, Kenya. The study was funded by Manitesse, an Italian NGO which, together with Ethnorêma, the Province of Bolzano (Italy) and NECOFA (Network for Ecofarming in Africa) is in charge of a multidimensional programme on agroforestry and beekeeping in the region.

The data presented here have been collected during 4 community meetings with elder Okiek beekeepers, a number of specific interviews with specialists (hive makers and expert beekeepers) and many others with common people of the locations around Mariashoni (Kiptungo, Kaprop, Ndoswa, Molem).

The transcription of the words responds to the actual phonetic expression of the speakers and nothing has been modified according to phonological rules, due to the fact that for an in-depth study of Okiek phonology further researches on the field have still to be done.

In the list, nouns are presented in their singular and / or plural form when existing. There is no reference to the gender of nouns because gender is not an Okiek category. Verbs are presented in their infinitive form. As far as the current morphological study of Okiek let us understand, we can say that the grammatical structure of the language is very close to that of Nandi, as it was presented in Creider & Creider 1989⁸¹.

The symbol ◆ introduces examples of the use of the word in context. The sentences are first translated according to their sense and between parentheses the reader will find the original Okiek word order).

The symbol → refers to other words relating in some ways to the one which is being commented.

As the reader will see, most part of the botanical lexicon still does not have a parallel scientific name. This is due to the fact that until now no ethnobotanical study in the region of Mariashoni has been made. Ethnobotanic investigation is anyway planned for next year, and it is our hope to have the possibility in a close future, to fill the gaps we are obliged to leave here.

Part 1. Okiek - English

ànuét (no plural) *string made of buffalo leather used by the Okiek (especially women) to carry any kind of weights on their shoulder. The leather string can be wider or narrower according to the object which have to be transported. In the case of a log-hive, usually transported by men, the string is about 8 to 10cm wide and some 2m long. The Okiek make the string pass on their front, then along their neck and shoulders and finally under the stuff they have to carry, so that all the muscles of*

⁸¹ Creider Chet A. & Jane T. Creider *A grammar of Nandi*, Hamburg: Helmut Buske Verlag, 1989.

their back can share the weight and balance the transport ◆ ànuét aβ m̀̀ingón rope for carrying the log hive

àsaé^{vh} (no singular) wax ? → t̀̀emeniét

(ε)sìsó:nèt (pl. (ε)sìsó:nòì^{vh}) tree whose hard wood is used to make log-hives → m̀̀ingét

f̀̀aβarári^{vh} (no singular) vegetal fibre, intertwined with the softer → s̀̀elekwét in the making of the small container for the children's honey → p̀̀ó:l̀̀èitó

g̀̀èβé:βér (pl. g̀̀èβé:βéruè^{gh}) wooden shell, half of a log-hive → m̀̀ingét

g̀̀ib̀̀oité:nr^{vh} (plural only) worker bee ◆ g̀̀ib̀̀oité:nr^{vh} t̀̀jé íβ̀̀ò k̀̀ó:m̀̀è^{gh} the workers produce honey (lit. workers these they + produce honey) → s̀̀ègemiát

(g)iráorí^{vh} (plural only) swarm. This term is appropriate for a common swarm, when the colony of bees is bigger than a common one, the Okiek call it a t̀̀újè:t aβ s̀̀ègemé^{vh} lit. a horde of bees

g̀̀ób(v)riòt (pl. g̀̀ób(v)rièni^{vh}) drone ◆ làmúum g̀̀ób̀̀uríót en s̀̀ègemiát the drone is bigger than a normal bee (lit. big drone then bee) ◆ p̀̀òrí s̀̀ègème^{vh} (k)g̀̀ób̀̀ùreni^{gh} drones were killed by the bees (lit. killed bees drones)

ísiàt (pl. isé^{vh}) 1. larva, 2. the plural form isé^{vh} has also the meaning of brood ◆ ísiàt k̀̀é:òmi a larva is eaten (lit. larva they eat)

ká:m̀̀èt aβ s̀̀ègemé^{vh} (no plural) queen bee, lit. “mother of bees” ◆ làmúum ká:m̀̀èt aβ s̀̀ègemé^{vh} en t̀̀óg̀̀̀l the queenbee is the biggest one (lit. big mother of bees then everyone) → s̀̀ègemiát

k̀̀autáni^{vh} → s̀̀ègeí^{gh}

k̀̀àlianát (pl. k̀̀àlianí^{gh}) insect, generic term. This word is never used to refer to bees, which do not belong to the same taxonomical category as other flies. This conceptual distinction demonstrates the completely different status of bees in the Okiek system of thought.

kalukt̪a:t (pl. kaluge:ni^{vh}) tree (?) whose wood is used to make the handle of the small axe for shaping the inside of the log-hive → k̀̀isien̪s̀̀óit

k̀̀é:β̀̀al (verb) to hollow out (a trunk for making a log-hive)

k̀̀é:β̀̀at (verb) to split (the trunk in two parts)

k̀̀é:β̀̀òtót (verb) to shape (the interior of the two wooden shells of the log-hive)

ké:yàk (verb) *to incise (the measure and shape of the opening → pó:nèt on one of the two wooden shells of the hive → gèbé:βér)*

ké:mù (verb) *to harvest (honey) ♦ kòmú kó:mè^{vh} / ségemè^{vh} I have harvested honey (lit. I+have harvested honey). Harvesting is a male activity. No fertile woman in the Okiek tradition could either approach the hive or touch honey if not once it had been brought home.*

ké:mwòg (verb) *to sting ♦ kò:mwògón ségèmiát a bee stung me (lit. it + stung + me bee) ♦ kò:mwógétf ségème^{vh} bees sting a lot (lit. sting + them bees)*

kè:nèjué^{gh} → pó:yfjòt

ké:sòhóí (verb) *to hang (the hive on the tree)*

ké:tfèn (verb) *to secrete (honey) ♦ tféñif ségème^{vh} kó:mè^{gh} bees secrete honey (lit. they + secrete bees honey)*

ké:tfòk (verb) *to roughly shape (the external part of the wooden shells of the hive → gèbé:βér)*

ké:tfùt (verb) *to lift (the log-hive on the tree). To lift the log-hive on the tree there must be at least two people. The first climbs on the tree, passing one or two long ànuét on a high branch of the tree and letting the other extremity or extremities fall to the ground, where the other boy fixes it or them around the log. Then the hive is lifted gently with a kind of rough, extemporaneous pulley.*

kéldèt aβ kò:yó (singular only; lit. *foot of the elder*) *very old honey remained in the hive for 1 year or more → kó:mè^{vh}*

kèrubé:t (singular only) *closing of the → pó:nèt (2.). The kèrubé:t is generally a kind of a puff, which can be made with any type of vegetal fibre.*

kìprá:skò (singular only) *small bird with white eyes and grey plumes (?), which is considered one of the major enemies of the bees by the Okiek.*

kìsiendzòit (pl. **kìsiendzòisie^{gh}**) *1. small axe used to shape the interior of the log hive → mùingét. This axe is made of a metal head, or chisel, from which it takes its name, and a wooden handle → kùjùktò 2. chisel*

kìsúnò / kìsúnùt (pl. **kìswóth / kìsunùsié^{gh}**) *Big wooden (sacred?) container, realized in a hollowed out trunk and stored in a sacred (and secret) place in the forest by the elder males of the community. In ancient times it was the elders' task to decide how much honey was to bring home, when and for which purposes.*

(k)lèkwélèt (pl. **(k)lèkwélèi^{gh}**) *bag for carrying honey used by old women (in menopause), to transport the honey from the place of collection to the secret place*

in the forest where it is stored in the → kùsúṅò and guarded by the male elders of the community. The same bag, made of vegetal fibres such as → kwómèrérièt and → tè:yát is also used to carry the honey from the secret place in the forest to the households.

kóyòríót (pl. kóyòrí^{vh}) *Queen bee cell.*

kòmdó (singular only) → pó:yǽḍt

kòṅdamát → pínè:t

kó:jógi^{vh} → sègeí^{gh}

kó:mè^{vh} (no singular) *honey. The Okiek distinguish many different kinds of honey, according to the plants and trees where the bees took pollen and nectar. Unfortunately in all but one case it is not possible to identify the botanical species of the tree or plant corresponding to the Okiek word cited. Specific types of honey are* ♦ kó:mè^{vh} aḅ tó:ṅotvèt *honey of tó:ṅotvet, clearer than the others and a bit more bitter* ♦ kó:mè^{vh} aḅ sílibuét *honey of tobea tree, white and sugary* ♦ kó:mè^{vh} aḅ mòrortá *honey of mòrortá, yellowish and somehow bitter* ♦ kó:mè^{vh} aḅ kàrabuét *honey of karabvet, which is a very small tree. This honey is used for preparing remedies against malaria. Its taste is sweet, the color white* ♦ kó:mè^{vh} aḅ tekwəjə *honey of tekwəjə, brown and sweet* ♦ kó:mè^{vh} aḅ séregùtiét *honey of séregùtiét brown and sweet* ♦ kó:mè^{vh} aḅ tèḅeṅwét *honey of tèḅeṅwét, brown and sweet* ♦ kó:mè^{vh} aḅ tù:nójèt *honey of tù:nójèt, which is a small and twisted tree. Its color is white and its taste sweet. For the Okiek, honey is a sacred substance. It can be handled only by men and very old, infertile women. Once collected, honey is stored in a secret place in the forest and it is up to the male elders of the community to decide how much of it (and when) it can be brought to the household, where it is used by the women in the preparation of food and medicines and as a preservative for dried, smoked meat. In ancient times honey was said to be the only source of energetic food for children between 3 and 8 years of age, that is from weaning until they learned how to hunt by themselves.*

kò:ṅí^{gh} (no singular) *holes made in the log-hive (→ mùingét) to let the bees get in and out of it.*

kó:té:t (pl. kó:tié^{vh}) *1. proboscis of the bee; 2. sting of the bee* ♦ ké:ṅùs kó:tèt aḅ ségèmiát *en èùt (nu) pull the bee's sting out of my arm (pull sting of bee on arm my) → ré:rì^{vh}*

kósomiat (pl. kósomé^{vh}) *bee without sting, halictus. Okiek call it “savage bee”. kósomé^{vh} make their hives in holes in the forest ground and their honey is very liquid and much sweeter than the common one. Okiek appreciate it so much that when someone discovers one of these hives he keeps it secret to the other members of the community → sègemiát*

kùnrúktò (pl. **kùnrúkwe^{vh}**) wooden handle of the small axe → **kìsienǰóit**, made of the wood of the → **kalukǰa:t** tree

kùrógùriét (pl. **kùrógùrí^{vh}**) vegetal fibre burnt during the smoking of the hive.

kùsúmdò (no plural) drone cell

kwómèrériét (no plural) vegetal fiber (?), intertwined with bamboo fiber → **tè:yát** used for making the bag for carrying honey → **(k)lèkwélèt**.

kwéstà (no plural) Alpha male of small antelopes or other kinds of deer. Its skin was used to make the shoulder bag for honey harvesting → **mótogè:t**

lókómé^{vh} (no singular) non alcoholic drink made with honey and water. Contrary to the sacred beer of honey → **ró:tí^{vh}** it can be drunk also by women in their fertile age.

mà:éni^{vh} (no singular) eggs ♦ **mí tèn mà:éni^{vh} tà:yí^{vh} órìt** the eggs are in the cell (here are eggs they + put cell)

mbò:let (no plural) kind of a small deer (?) whose alpha male's skin can be used to make the shoulder bag for honey collection → **mótogè:t**

mèǰé:ità (pl. **mèǰéí^{sh}**) pike, spear, used to make the holes in the hive, where to let the thread → **túnò:jét** pass in order to sew together the two wooden shells → **gèbè:βér** and keep them in the right position

mindet (no plural) red duiker. The skin of the alpha male of this kind of small deer is commonly used for making the shoulder bag for honey collection → **mótogè:t**

mòyó:nǰèt (pl. **mòyó:nǰò^{vh}**) cedar tree, one of the preferred woods used for making log-hives ♦ **mòyó:nǰèt ñòǰát** fallen cedar tree (lit. cedar mature). The Okiek, when possible, prefer to use already fallen tree to make their hives rather than lively ones. → **sasiát; mùingét**

mò:rtét (pl. **mò:rí^{vh}**) strips of a special kind of green bark used to protect the hive → **mùingét** from temperature variations and other weather adversities. Once these strips become dry, they are called → **pé:rtét** these stripes are usually made of a special kind of cedar tree → **tóró:kwèt**

mòtogé:t (pl. **mòtogóí^{sh}**) shoulder leather bag for honey harvesting. Okiek elders say that in ancient times it had to be made with the skin of alpha males of small deers → **kwéstà**.

mùingét (no plural) / **mùingón** (**mùingóni^{sh}**) handmade traditional log-hive Ex. ♦ **kà:lá mùingét** I have taken (honey) from the hive (lit. I+have harvested hive). The **mùingét** is usually made with hard wood, like the one from the cedar tree →

mòyó:ndzèt, or from other forest trees such as → **(ε)sìsó:nèt**; **ðunít** for which we do not know the corresponding scientific labels. The best wood is that of **mòyó:ndzèt** and **(ε)si:sònet** because harder than the one of **ðunít** ♦ **ótìnrì múingoni^{gh} tʃéʃán** I have many beehives (lit. I+ have beehives many) → **pó:nèt**

nàrù:^{vh} (no singular) ripe honey (1 month) → **kó:mè^{vh}**

ndàmé:t (no plural) thin stick on which one rubs the → **pínè:t** in order to make fire to smoke the hive.

nò:ɣí^{vh} (no singular) pollen? nectar? royal jelly? ♦ **íβù ségème^{vh} nòɣí^{vh} en tó:βtò** bees gather pollen and nectar (lit. they + gather bees pollen on flowers)

ðyórièt aβ (i)ndèrít (lit. skin of hyrax - no plural) cloth made with hyrax skins, used as a mantle by the beekeepers during their harvesting operations. The mantle is so long that it can cover the beekeeper's head, as well as its complete body. The beekeeper keeps it closed right under the chin by his hand when approaching the hive.

ðjué:t (pl. **ðjó:nò^{gh}**) axe used for making a log-hive → **mùingét**

ðmólilít (pl. **ðmólilòsié^{gh}**) special kind of bark used to make small threads to sew together the two shells of the hive → **gèβé:βér**

ðunít (pl. **ðunó^{vh}**) forest tree whose wood is used to make log-hives → **mùingét**

pé:rtét (pl. **pé:rí^{vh}**) stripes of dry bark wrapping the log hive → **mùingét** to protect it from temperature variations and other weather adversities. These strips must be at least 20 cm longer than the hive itself in order to protect also the bees when they get in and out of the hive. When they are still green they are called → **mò:rtét** These stripes are usually made of a special kind of cedar tree → **tòrò:kwèt**

peʃenit (no plural) kind of a small deer (?) whose alpha male's skin can be used to make the shoulder bag for honey collection → **mótogè:t**

pínè:t (or **kónɗàmát** no plural) thin stick of hard wood (cedar or any other dry wood), used together with the → **ndà:mét** to make the fire for burning the → **kùrógùriét** when smoking the hive.

písìndá (no plural) kind of vegetal fibre used to make small threads for fixing the bark stripes → **mò:rtét**; **pé:rtét** around the log-hive → **mùingét**

pò:gít (no plural) worker cell.

pó:ɣʃòt (pl. **pó:ɣí^{vh}**) honeycomb. The Okiek know and distinguish three types of comb: the long one **kòmdó** (singular only), the cross comb **sèma:né^{vh}** (plural only), and the short, round one **kè:nèjué^{gh}** ♦ **kò:ɲdén ségème^{vh} kó:mè^{gh} tà:ɣíyh aβ**

pò:ktʃót *bees make honey in the honeycomb (lit. they + make bees young honey in honeycombs)*

pó:lèitó (pl. pó:lèití^{vh}) *small bottle-shaped container for storing at home the honey destined specifically to children, made of two intertwined types of vegetal fibre → sèlekwét, and → fàβarári^{vh}*

pó:nèt (no plural) *1. natural beehive, usually made in hollow trunks; 2. (pl. pó:nìti^{gh}) handmade opening of the → mùingét, hole constituting the opening of 1.*

ré:ri^{vh} (no singular) *sting of the bee ? → kó:té:t 2.*

ró:tí^{vh} (no singular) *beer ♦ ró:tí^{vh} aβ kó:mè^{vh} / aβ ségemè^{vh} beer of honey. The Okiek use this alcoholic drink in all ritual occasions but the funerals, i. e. births, initiations, marriages, the building of a new house etc. Only male adults and very old women with the males' permission can drink this beer. This demonstrates the sacred value of honey.*

rò:tíni^{vh} (no singular) *bitter vegetal substance used to make beer → ró:tí^{vh}*

ró:twèt (pl. ró:tò^{gh}) *knife used to incise the measure and shape of the opening of the hive → pó:nèt. The actual cut will then be made with the small axe → kìsienčóit*

sa:βo (no plural) *warm place*

sasiát (no plural) *cedar tree. It is commonly used for making log-hives. Its bark is cut in very small pieces and put, burning, inside the → kùrógùriét in order to grant a good smoking of the hive during honey harvesting.*

sègemiát, (pl. sègemé^{vh}) *bee, general word, Apis mellifera Ex. ♦ újè sègemé^{vh} the bees migrate (lit. they + migrate bees) ♦ kò:ú sègemé^{vh} jemi ómdìt the bees migrate to look for food (lit. they + have migrate bees they + look for food) ♦ métit aβ sègemiát (pl. métógwè^{gh} aβ sègemé^{vh}) head of the bee ♦ pó:rt(ò) aβ sègemiát (pl. pó:ruè^{gh} aβ sègemé^{vh}) thorax of the bee ♦ mò:ét aβ sègemiát (pl. mó:tènwé^{gh} aβ sègemé^{vh}) abdomen of the bee ♦ kéld(à) aβ sègemiát (pl. ké:liè^{gh} aβ sègemé^{vh}) leg of the bee ♦ mārábù^{vh} aβ sègemiát wings of the bee ♦ mà:éni^{vh} aβ sègemiát eggs of bee ♦ ségème^{vh} óèn two bees (lit. bees two) ♦ ségème^{vh} kò ségème^{vh} bees are bees (lit. bees actualizer bees), in the Okiek way of thought it is impossible to think of a bee as an insect, so they refuse to translate a sentence like “bees are insects” ♦ ótʃòmí ké:βèndát ay ségème^{vh} I like to work with bees (lit. I + like to work with bees) ♦ újè ségème^{vh} the bees are swarming (lit. they + swarm bees) ♦ ménèʃ ségème^{vh} múingèt the swarm lives in the beehive (they + live bees hive)*

sègeí^{gh} (no singular) *scout bees. Task of the scout bee is going around looking for flowers and call the worker bees to collect the pollen. When it is time to migrate, the scout bees look for a new hive to settle in and, at the right moment, they call the swarm to get inside.* ♦ **sègeí^{gh} kòsegéi yemí tó:βtò** *the scouts look for flowers (lit. scouts they+look + they+find + flowers)* ♦ **sègeí^{gh} kòsegéi mùngét / pone:t** *the scouts look for a hive (lit. scouts they+look handmade hive / natural hive)* ♦ **sègeí^{gh} kòsegéi jeburugi^{vh}** *the scouts look for a warm place (lit. scouts they+look for warm place)* ♦ **sègeí^{gh} kògúri sègemé^{vh}** *the scouts call the bees (lit. scouts they+call bees).*

sè:rse:rí^{vh} → gíboíté:ni^{vh}

sèlek wét (no plural) *vegetal fibre used, together with the → fàβarári^{vh} to make the small container for the children's honey → pó:lèitó*

sèma:né^{vh} (no singular) → **pó:γfòt**

sìñimiét (pl. **sìñi:mí^{vh}**) *ant, generic term. Ants are among the most dangerous enemies of the bees, because they eat their eggs → táγò:γòí^{vh}*

sóγòtiát (pl. **sóγòtí^{gh}**) *natural bifurcation of two tree branches. The Okiek consider it as the most appropriate place to put a log-hive on → mùngét. When a tree does not have a natural bifurcation, the Okiek create an artificial one → téjuòt, which is a kind of a long crutch reaching the ground*

sómòseriet (pl. **sómòseri^{gh}**) *red bee (?). These bees are said to be very aggressive and their honey seem not to be very good.*

tá:βtèt (pl. **tó:βtó^{gh}**) *1. flower, generic term; 2. nectar?*

táyò:γòí^{vh} (no singular) *small ants of the cow, considered very dangerous for the bees by the Okiek → sìñimiét*

tè:γát (no plural) *bamboo fiber used with the → kwómèrérièt for making the bag for carrying honey → (k)lèkwélèt.*

téjuòt (pl. **téjuè^{gh}**) *artificial bifurcation of a tree, made by the Okiek to put the log-hive in the right position on a tree. Of course it would be better to fix it to a natural one → sóγòtiát*

tèmeniét (no plural) *wax ? → àsaé^{vh}*

tóbòkwét (pl. **tóbògí^{vh}**) *special kind of cedar tree whose bark is used to make the stripes → mò:rtét; pé:rtét used to protect the log-hive from weather adversities.*

tújè:t → (g)iráorí^{vh}

túnò:jét (pl. túnò:jí^h) *thread made of bark* → ðmólílít *used to sew together the two wooden shells of the hive* → gèβé:βér

ʃéptiyige (pl.?) *black bee* (scientific name?). *These bees are said not to be aggressive. Their honey seems to be appreciated.*

uá:è^h (no singular) *propolis*

váruvèt (pl. várè^h) *pupa* ◆ kó:γòmúʃ váruvèt aβ ségèmiát kòmón en pó:γì^h *the pupa is ready to go out from the honeycomb* (lit. *it+is ready pupa of bee it + go honeycombs*) ◆ mí ísè^h ay várè^h ðrít pó:γì^h *larvas and pupas are in the honeycomb* (lit. *there larvae and pupae inside honeycombs*)

Part 2. English – Okiek

alpha male, small deer, kwéstà

ant, sɪjimiét

ant of the cow, táyò:γòí^h

Apis mellifera, ségemiát

axe, ðjué:t

axe (small), kɪsienʒót

bag for carrying the honey, (k)lèkwélèt

bamboo, tē:γát

bark to make small threads, ðmólílít

beehive, pó:nèt / mùingét

beekeeper, 0

beekeeping, 0

beer of honey, ró:tí^h aβ kó:mè^h

beverage (analcoholic) made with honey and water, lókómé^h

bifurcation (natural), sóyòtiát

bifurcation (artificial), téjuðt

bird (type of - dangerous for the bees), kìprá:skò

black bee, ʃéptiyige

brood, ísè^h

cedar tree, sasiát / mòyó:nʒèt / tɔrò:kwèt / (ɛ)sisó:nèt

cell, drone cell, kùsúmdò

queen cell, kóyòrɪót

worker cell, pò:gít

closing of the artificial beehive, kèrvbé:t

cloth (hyrax skin), ðyúrièt aβ (i)ndèrít

colony (big) of bees , tújè:t

container for honey , kɪsúŋò / kɪsúŋùt

container (small) for the children's honey, pó:lèitó

deer (small), pɛʃfɛnit / mbɔ:let

drone, gób(v)rɪðt

eggs, mà:éni^h

flower, tàβtè:t

Halictus, kósomiàt
 (to) hang (the log on the tree), *ké:sòhoí*
 (to) harvest (honey), *ké:mù*
 holes to let the bees in and out of the hive, *kò:ηí^{2h}*
 (to) hollow out (the wood), *ké:βàl*
 honey , *kó:mè^{yh}*
 ripe honey (1 month), *nàrù:yh*
 old honey (1 year or more), *kéldèt aβ kò:γó*
 honeycomb, *pó:γfðt*
 long comb, *kòmdó*
 cross comb, *sèma:nè^{yh}*
 short, round comb, *kè:nèjuè^{2h}*
 (to) incise the opening of the hive, *ké:γàk (pó:nèt)*
 insect, *kàliaηát*
 knife, *ró:twèt*
 larva, *ísiàt*
 (to) lift (the log hive on the tree), *ké:tfùt*
 nectar, *tá:βtèt*
 opening of the hive, *pónè:t*
 pike, spear, *mètjé:ità*
 pollen ?, *nò:γí^{yh}*
 proboscis, sting, *kó:té:t*
 propolis, *vá:è^{yh}*
 pupa, *várvèt*
 queen bee, *ká:mèt aβ ségème^{yh}*
 red bee, *sómðseriet*
 red duiker, *mindet*
 rope for carrying the hive in the forest, *ànuét*
 royal jelly ?, *nò:γí^{yh}*
 scout bee, *kàutáni^{yh} / kó:jógi^{yh} / sègeè^{2h}*
 (to) secrete, *ké:tfèn*
 (to) shape (roughly) the external surface of the hive, *ké:tfðk*
 (to) shape the interior of the log, *ké:βàtót*
 shell / half log, *gèβé:βér*
 shoulder bag for honey harvesting, *mòtogé:t*
 (to) split (the wood), *ké:βàt*
 sticks used to create fire, *pínè:t / ndàmé:t*
 sting ? , *kó:té:t / ré:rí^{yh}*
 (to) sting, *ké:mwðg*
 stripes of dry bark, *pé:rtét*
 stripes of green bark, *mò:rtét*
 swarm , *(g)iráorí^{yh}*
 thread , *túnò:jét*
 vegetal fibre burnt during the smoking of the hive, *kùrógùriét*
 vegetal fiber for making the bag for carrying honey, *kwómèrériét*
 vegetal fibre used to fix the bark stripes on the hive, *písindá*
 vegetal fibre used for making containers, *sèlekwét* and *fàβarári^{yh}*
 vegetal ingredient used to make honey beer, *rò:tíni^{yh}*

warm place, *sa:βo*

wax ?, *tèmeniét / àsaé^{yh}*

wings *márábì^{yh}*

wood used for making the hive ?, *ðunít*

wooden handle of the small axe, *kùnúktò*

wooden shell / half hollowed out trunk, *gèβé:βér*

worker bee, *sè:rse:r^{yh} / gìbòitè:n^{yh}*

Table 1



1. View of Mariashoni



2. View of the Mau forest

Table 2



3. Hunters



4. Joseph Jemaina

Table 3



5. Brood, isé^{yh}



6. Honey, kó:mè^{yh}

Table 4



7. Natural hive, pó:nèt



8. Handmade hive, mùingét, covered with bark stripes, pé:rtét

Table 5



9. From left to right, clockwise: ànuét, pó:lèitó, ró:twèt, kisiendzót, mètjé:ità, ðjué:t



10. Iron blade of the small axe, kisiendzót

Table 6



11. Small axe, chisel (kisiendzót) and handle (kùnúktò)



12. Pike, mèŋé:ità

Table 7



13. Knife, ró:twèt



14. Opening of the hive, pó:nèt

Table 8



15. Closing of the pó:nèt, kèrubé:t



16. Thread, túnd:jét; hole for letting bees enter and exit the hive, kò:ŋí^{gh}

Table 9 - Harvesting time



17. Samson Mureno with his traditional mantle, ðýrièt aß (i)ndèrít



18. Tools for smoking the hive

Table 10 - Tools for harvesting



19. Pínè:t and ndàmé:t



20. kùrógòriét

Table 11 - Tools for harvesting



21. Mòtogé:t, kùrógùriét, pínè:t and ndámé:t, pó:lèitó



22. pó:lèitó

Table 12 - Going for harvesting



23. Beekeeper with his bag for harvesting



24. Climbing to the muingét