

Voice, sound, melody: Music as a training tool and a way to interact with elephants in Northeast India

Nicolas Lainé, Laboratoire d'Anthropologie Sociale, Collège de France, Paris

Paper presented at SOAS Elephant Conference – London – 20 November 2016

Abstract: The training of the animal is a crucial period within human-elephant interspecies community. It is the time when man and animal get to know each other, define modalities and forms of communication, and create a common intelligible world which will be used in their future interactions. This initial contact is also crucial in the development of attachment and bonding: their long term partnerships will evolve on the basis of this primary encounter.

In Northeast India the Khamtis, as well as other local populations, address chants to newly captured pachyderms during each step of their integration into the human world. What are the peculiarities of these chants and how can we define them? What roles do they play in the training process? Within the interspecies communication, what are the differences between voices (commands), sounds and melodies?

This chapter purposes to explore the various functions (pedagogical, communicative and social) of chants during elephant training, by studying their contents (their lyrics, forms and rhythms). The analysis will support the argument that, primarily used as an intangible tool for training elephants, music is constitutive of the interspecies community. Sung on various occasions after training, chants are also part of the vocal communication used by the Khamtis to interact with animals in their long partnership.

Introduction – Music, Training and Elephants

At the beginning of 19th century an experiment was made at the Ménagerie du Jardin des Plantes in Paris. A musical band was sent to play on the upper part of the stall in which two elephants, Hanz and Parkies, were kept. A perfect silence was initially procured, some of the elephant's favorite foods were given to the animals to engage their attention, and then the musicians started playing. The music no sooner struck the ears of elephants than they ceased from eating, and turned in surprise to observe from where the sound was produced. If the view of musicians and spectators initially brought fear to them, the music soon overpowered their fears, and all of their emotions became completely absorbed by the music till the end of the concert (Houel 1803). This experiment was described as "curious", and was simply taken as an anecdotic story by American behaviourists in the last century. Nevertheless it appears that for some local populations daily engaged with elephants, the sensitivity of elephants to music is something they are using in their day-to-day relationships, and more specifically at the time of elephant training.

The initial training of an elephant is indeed a crucial period within the human-elephant interspecies community. It is the time when humans and animals get to know each other, define modalities and forms of communication, and create a common intelligible world which will be used in their future interactions. This initial contact is also crucial in the development of attachment and bonding: their long-term partnerships will evolve on the basis of this primary encounter. Training elephants gives the opportunity to everyone (human and animal) to learn from each other and to reveal respective temperaments and characters. Once this period is completed, the elephant starts his new life among humans and other congeners. He will then continue to learn and no doubt to develop specific capacities, commands and attitudes according to the work he is likely to perform in his/her career (tourist's safari, timber hauling, patrolling, etc.).

This chapter deals with the role of music both used as a training tool and a way to interact with elephant among the Tai-Khamtis in Northeast India. The Khamtis are comprised of ten thousand individuals only. Linguistically related to the Shan, mostly found in Burma but also in China and Thailand are Buddhists and have their own alphabet. In the middle of the 18th century, they are detached from Khamti groups found scattered especially in the current Kachin state of Burma. Since their migration to North-East India, they live and work with elephants.

Among the Khamtis the training of elephant occurred few days after his capture. [1] According to Khamti's view, at the term of this process, the forest elephant (*chang thun*) becomes a village one (*chang man*). Such transformation, which imposed to the animal is irremediable. The young elephant will then start a new life among human and other village elephants. This process goes by two step: the elephant should first be habituated with the human presence at his sides, then learning commands and basics of his new living conditions. During the two steps of this process, two specifics chants are continuously intoned by the trainer to the newly caught elephant. They are constantly accompanied by tapping and caresses on the animal. Considered as mandatory by all the *phandis* (elephant catchers) and mahouts interviewed during fieldwork, I was told that through the sounds of melody, words exert power over the animal. And according to Khamtis experts, it is only by singing that the elephant will listen to them. [3]

Throughout my fieldwork, I also used to observe Khamtis singing chants to their elephants on various occasions in their day-to-day activities. As for example while bathing the animal, or at work, in forestry activities it has happened to me to observe a mahout singing to his elephant if the animal, for some reasons, was unmotivated to finish his daily work.

In Northeast India, the used of music to train elephants is a shared practice between the Khamtis and other local populations [4] considered as specialists of elephant domestication. In Assamese language – the lingua franca for the entire northeast – there is a particular expression to qualify such chants: *hati xikuwa geet*, which literally means "song to train elephants" (Moran, 2007 : 256). More generally, singing to elephants during their training is a well-known and observed practice throughout Asia and Southeast Asia since time out of mind. In his journal "*Indica*", Megasthene, Ambassador of Seleucus during the Chandragupta Maurya reign mentions that Hindu people used to chant to elephants to calm them down and used a string instrument to that effect. Recalling a situation in which a calf elephant was refusing to be fed by its mahouts, he mentioned: "But it is still angry with them, and takes no notice of them. To what device do they then resort? They sing to it their native melodies, and soothe it with the music of an instrument in common use which has four strings" (McCrinkle, 1877: 93). More recently such practices were mentioned by several observers or elephant specialists at the time of elephant training. This is the case in India (Barua 1997; Bertrand 1960; Stracey 1963), in Laos (Fiasson 1961), in Myanmar (U Toke Gale 1980) and in Nepal (Locke 2011). In the Kingdom of Siam (Thailand), F.H. Giles (1932) reports that songs were especially composed for the white elephants, considered as the noblest of animals. Such songs were sung to drowse or calm the pachyderms. Still in Thailand, Raymond Plion-Bernier mentions that during the training of newly caught elephant, Brahmins, who assisted at the ceremony, chanting their religious manuscripts accompanying the expert hunter in his operation (Plion-Bernier 1969).

While music appears present across Asia very little information has been given so far on the content of these songs, on their form and their roles especially during the training process. Based on my observations I will describe the context (implementation of speech, moments of speech) in which chants are used during elephant training and make a content analysis (speech, form, rhythm) in each of the two training steps. I propose here to explore various functions of this particular form of singing by answering the following questions: What are the peculiarities of these chants and how can we qualify them? What

roles do they play in the training process? Within the interspecies communication, what are the differences between voice commands, sounds and melodies?

The habituation of elephant to the human presence

Among the Khamtis, the first step of elephant training starts about ten days after a newly caught animal is brought back to the village. Ten days is the time necessary for the Khamtis to find a place in which the operations will take place, and to prepare the requisite materials (ropes, etc.). This is a camp located at the border of the village and if possible close to a stream, so as to bathe the animal.

Before the training starts, the trainer has to make ropes and build the *khemari* (in Assamese) or *lak chang* (in Tai) which is the place where the first step will be held. It is a wooden structure made of two logs sufficiently spaced to lodge the animal. [5] The logs are driven into the ground obliquely so as to increase their resistance.

During this period, it is customary to leave the young pachyderm alone in the forest, securely tied to a tree. No food is given to him in order to weaken the pachyderm; [6] the mahout only comes to visit him twice a day to ensure that there is no danger and to check the ropes and nodes.

Once the *lak chang* is built the first operation consists in lodging the animal at the centre of it. The elephant is tied in such way that he should not be able to move freely. His hind legs are tied together and pulled back, while his forelegs are directed forward to the unbalance and prevent him from using his strength. During his first immobilisation his ear is pierced with a long heated iron rod, this hole will serve during the second step of the training.

The first step aims at making the animal accept the human presence at his side. It is of making accept the elephant all that is involved in human presence at his side. The first voice, the touch, but also visual contact and smell. This primary socialisation is mandatory before teaching him commands.



Figure 1: A juvenile elephant mounted for the first time. Photo: Nicolas Lainé

The sequences consist in petting, massaging and rubbing every part of the elephant's body while reciting a chant to the animal. During each session, in unison, all the people kept on singing, while strongly touching the animal. The chant is enacted at the very moment when tactile contact with elephant starts. The animal is generally trumpeting loud and trying to break free from the ropes, but as the sessions go in morning and evening, he gradually accept to be touched, and trainer starts loosening some of the ropes.

At night, the animal is also tied to the lak chang. During this period, trainer and assistants, go flaming torches around his body to get him used to the heat and make him not to fear fire. [7] Moreover, according to a Khamti belief, forest spirits (*phi thun*) live on the skin of the animal and cling to the hair (*khon chang*) thereof. Thus, by passing of torches, the Khamti-trainer intend to burn hairs and then make the spirits return to the jungle. By doing so men sing the same initial chant to the animal [8].

After successive sequences occurred in the morning, afternoon and during night time, it is when the trainer can sit on the back of the animal, without any aggressive or negative attitudes of his side, that this first step is considered as completed. It is then time for the juvenile elephant to continue his apprenticeship by learning some commands.

This first step is no doubt the most difficult and painful for the elephant (native and foreign experts often call this period "breaking-in-phase", or "breaking the spirit of the elephant". In Kerala (South India), this phase is called "*kettiazhikkal*" [9] (Panicker

1997). When I questioned them, it was difficult to my interlocutors to justify coercive methods used in this first step, but also what precedes it: the fact of starving animals. They replied me that it should be as short as possible. It generally lasts for 7 to 10 days. Actually, the duration depends not only on the nature and size of the elephant, but also the experience of the trainer. On that point, it must be said that Khamtis recognise a good elephant trainer's skills if he manages to complete this step in less than ten days. Within this short period, he has to gain the trust of the animal and to forge links and bonds with him as for their future interactions.

At last, it must be noted that this first step is hard for men too, which should ensure and constantly relay around the animal so as not to let him break. Some Khamtis have told me that they refuse to sleep during this time because the elephant is likely to regain strength and become stronger, which would extend this step further. In some cases, it can have dramatic outcomes: some elephants die because they refuse to eat. In fact, a sign that the familiarisation goes well is when the animal is willing to be fed by the human's hand.

We will now focus specifically on the study of the chant sung throughout this stage.

Oh dhaat!	Stop!
Habi mon erebi, manu mon dhoreb	Leave your jungle heart and adopt man heart
Manu kotha manebi, manu khota	Learn the words from man, listen to them
unebi	Babu yes, petting
Babu ye sobye	Leave your wild heart and become a konkie
Kesa mon erebi, kumkie mon	Accept mahouts words, accept him as your
dhorebi	owner
Mahout khota manebi, malik bule	Babu yes, petting
manebi,	Babu yes, petting
Sobye babu sobye	Leave your forest heart and adopt man heart
Sobye babu sobye,	Learn the words from mahout, understand and
Habi mon erebi, manu mon	Learn them
dhorebi	Give your ears, open your eyes
Manu kotha unebi, mahout khota	Whatever be the words and work, they are
bujebi, mahout khota manebi	good
Kan meli hunebi, suku meli sabi	Babu yes, petting
Yeh naam hoy hoy , Yeh kam hoy	Babu yes, petting
hoy	Yes you know, yes you understand,
Sobye babu yeh sobye	Yes you know, yes you understand,
Sobye babu sobye	I caught you from the jungle and tied you to the
Hoy hoy janele, hoy hoy bujile	<i>khemari</i>
Hoy hoy janele, hoy hoy bujile	Whatever be the words and work, they are good
Jungle pora dhoi aani, khemari te	Babu yes, petting
bhandi	Babu yes, petting
Yeh naam hoy hoy , yeh kam hoy	Yes you know, yes you understand,
hoy	You were in the mountains and ate bamboo
Sobye babu sobye	shoots
Sobye babu sobye	You came to the plain, and take food from your
Hoy hoy janelé hoy hoy bujelé	<i>pandhi</i>
Paharot asilé kako gaazali khai	There is water inhabited by microbes here
Boyamoloy ahilé toy phandi theka	If you are kind, I will untied your legs
khai	
Panit hace, panit kaora bhamot	
hace beang	
kosor mosor nokoriba meledia	
thang	

Table 1: Lyrics and transcription of the first chant

An analysis of the content of this chant gives indications regarding the nature of the relationship that the Khamtis seek to establish with the elephant and their intention towards the animal.

The transcription shows that the Khamti-trainer addresses the elephant using the interpersonal pronoun "toy". In Assamese, close to Bengali language "toy" is the interpersonal pronoun employed between people of the same age, or with relatives, it is also the pronoun used when addressing to a child. To lower caste or to someone one berates that. (This interpersonal mode of communication is opposed to "apuni" used with elder or respectful person, and / or with "tumi").

In the chant, when the trainer wants to call the elephant, he uses the affectionate term "babu", generally uses to call infants (alternatively if the trained elephant is a female they use "maine", the feminine equivalent of "babu"). Actually, at the time of his training, the elephant does not have a name; it is only after this process that the owner will assign him a name.

These two points, the use of familiarity "toy" and the term "babu", show that the trainer seeks to establish an intimate relation with the elephant. Nevertheless, the trainer sings in an authoritative mode, as demonstrated by the use of the imperative present which expresses an order or advice. By these injunctions, the elephant is encouraged to be attentive and to trust him the trainer ("Stretch out your ears and listen, open your eyes and see").

This last point is also emphasised by the form and verb tenses in the narrative and the story given to the animal. Verbs are in the mode of the present imperative, the modal used to express orders or advice. Here, the elephant is invited to be attentive to what he is told ("Hold out your ears and listen; open your eyes and look") and to trust the human. The man remains firm; he is given injunctions but seeks to make the animal attentive, in the same way as in a waking song for children.

If we look at the register now, the transcription reveals a series of contrasts between the life of wild elephants and the living condition of elephants among men. Lyrics refer to the thematic of jungle ("habi") in opposition to that of men ("Manu"). As for example, the mountain ("pahar") is opposed to the plain ("boyam"). Moreover, the trainer asks the elephant to accept food from his hand by saying: "In the mountains, you ate bamboo shoots; in the plain, you take the food of your grabber."

Interestingly, the trainer gives the elephant a story of his capture, he is also explaining what he is experiencing, "I caught you in the jungle and I tied you to *khemari*", what will happen to him and how to behave ("take the words of the mahout, understand the words of the mahout"). Lyrics are therefore addressed directly to the animal, requiring him to accept human presence at his side ("Leave your heart of the mountain; take the one of the plain"). The trainer asks the elephant to renounce to his jungle life and to live within human society. We should remember that Khamtis are plains people, while elephants – specially during the monsoon season, used to go in the mountains.

This study on the meaning of the lyrics reveals an educative register close as a parent do with children. It is based on affection and authority.

So far I have discussed the content and form of the chant; I will now look at the style. Verses are short, composed of two or three lines. Most of the verses are concluded by a strong accentuation of the last syllabi or with onomatopoeia sounds ("*hoy, hoy*"), which Remi Dor (2002) called *huchement*. In their daily life, and after the training completed, such sounds are usually pronounced by the mahout: they are part of communication used by humans to interact with elephants. At this stage the elephant is not trained yet: we can

assert that the use of onomatopoeia here aims at preparing the animal to the vocal communication he will be taught in the second step of training.

Same couplets are continuously repeated with small rhythmic and lyrics variations. The melody is soft. The trainer sings in a monotone tune. This chant looks like a lullaby for elephants, even though the objective here is not to asleep the elephant since the trainer expect a cooperation from him. French ethnomusicologist Michel Imberty reminds that songs can mark duration and regularity, and in the case of lullabies, they help children to structure time (Imberty 2002: 512). The chant here is at midway between speech and song. To some extends, it takes the characteristic of "baby talk" language as highlighted by the American psychologist Daniel N. Stern. The chant is based on repetition and variations sing in a soft melody. According to Stern, for a child this dual principle of is essential in its construction of the self: the musicality of "baby talk" language helps the child to create bookmarks, also to be attentive (Imberty 2002: 513). This is, he adds, a universal and fundamental aspect of psyche for any individual (whatever it is a child or in the present case an elephant). Thus, we can consider that when an elephant is tied to the *lak chang*, the melody helps him to accept and to build his new living condition: through the hearing of music the wild animal becomes a village one.

Imberty (2002) observes that "baby-talk" language has two main functions: to raise the attention of the infant and to calm him when he is afraid (Imberty 2002: 516). These two functions seem to be present in this chant, where lyrics are always accompanied by affective gestures to calm the elephant's fear and / or to keep him aware of what happen to him. Thus the role of chant here is less an educative than a socializing one: just like any parent does with a newborn child, it helps the animal to become familiar with the human environment.

Moreover, Michel Imberty recalls that in the early months of the children socialisation (between three and six months), "what is probably the less important, is what the mother said to his child, the most important thing is the musicality of the sounds she produces" (Imberty 2002: 514). And this seems particularly true if we remind that Khamti sing in Assamese, and that many of them confess me that they don't understand the meaning of the lyrics.

Even if it looks familiar with the "baby talk" language, the aim of the trainer here is not to substitute himself with a mother for the elephant (even though he is aware that domestication implies to respond to some of the animals needs). Actually, during each sequence, the objective is to bring the elephant to replace a behavior by another: more precisely to replace the escape behavior by indifference to human and fire. Thus the objective is not here to produce an "imprinting" as highlighted by the ethologist K. Lorenz (1941). Furthermore, the phenomenon of imprinting is related to a phenomenon of a spontaneous attraction of the animal, where there is no substantial physical constraint. This is far from the case here, where the animal learns to live within humans in the village, and importantly, the goal is not that it is dependent on a single individual to whom it will simply learn to respond. This first step is more like an habituation process. It aims to establish a co-presence and therefore a lasting bond between the elephant and human.

During this first step, considered as the most painful and difficult, humans continually recite the same chant, the same lyrics to the animal, which settle with the violence of their gestures, often punitive: the elephant is pricked on the trunk so that he cannot use it to charge; when necessary ropes are tightened, to control and prevent the pachyderm to try to get rid of the wooden structure) so that he does not bristled, and no longer seeks to charge the men or to undo the strings. The music here somehow brings a certain form of affection. In some way then The music here would soften the treatment inflicted on the animal. One might even suggest that music also serves to men, it helps them to keep

patience and to calm themselves. The Khamti trainers are often tired and exhausted, and although in another register the animal, this period is also grueling for them.

Becoming a village elephant: learning commands

Accepting the presence at his side is only the step first of the integration of a newly caught elephant in the village. The elephant will then continue his socialisation by learning commands through an apprenticeship which constitutes the second step. Before untying the elephant for the *lak chang*, a rope is wrapped around his neck, the *sai kho* [10]. This rope has an important role, every village elephant possesses one. This is an example from this that will connect the necessary cables with different activities; it is also against this rope that the mahout will drag his feet in order to transmit gestural commands to the animal when seated on his neck. [11]

This second step clearly marks the beginning of the animal's life among men and other congeners. It is longer than the previous one and does not take place in a confined space (the *lak chang*) at the boundary of the village, but along a field. The purpose of this second step is to teach commands to elephants. It is to advance the elephant and to teach him to respond to simple commands such as *agaat* ("go ahead"), *pischu* ("stop"), *dhaat* ("stop"), *soi gum* ("turn"), *boit* ("sit"), at the rhythm of a new chant. To constrain the animal to comply, he is first surrounded by two village adult elephants, to which ropes bind him. The presence of konkie is doubly important in this apprenticeship: on the one hand, without them men would be unable to control the animal since it must be free to move; secondly, because konkie serve as an example to follow. Thus, during the sequences, the congeners are used both as a means of control and security that animal as a way of learning by imitation.



Figure 2: A training session with a newly caught elephant. Photo: Nicolas Lainé

During the sessions, two humans are always necessary whatever be the number of village elephant. A trainer sits on the animal back, a second man held the elephant by the *sai kho*, attached to the original of his ear hole like a leash. The trainer on the elephant back guides the operation. With his feet, he adds the action to the word, taught according to the taught command; he supports with his feet behind the ear. Once arrived at the end of the field; a treat is systematically given to the animal as a reward (a piece of sugar or salt rice ball wrapped in a banana branch). Gradually, as the young elephant incorporates the commands, one konkie will be necessary for continuing his apprenticeship, he will finally

end only. Indeed, the second step is considered as completed when the elephant responds to the commands.

This second step refers to a more classical associative learning with positive and negative reinforcement. Whenever the animal has responded positively to the command, the trainer congratulates and gives him a leg as food. Moreover, one can also consider that an imitation process is occurring during this step. It is by imitating other village elephants that the apprentice answer positively to commands address to him. It seems that the apprentice imitates his fellow village elephant because he trusts him. In fact, at this step, the elephant has probably not yet significant knowledge to understand what is expected from him. Nevertheless, he may be reassured to see another elephant accomplish a task that he will, in turn, have learned to achieve. In other words, he has confidence in the trust that his fellow village elephant bears on humans.

As for the first chant, I will now focus on the study of the second one.

Haste haste agaat jah!	Slowly, slowly, move forward!
Sida bhaté agaat jah!	Continue quietly, move forward!
Diré diré agaat jah!	Again, again, move forward!
Sida bhate agaat jah!	Continue quietly, move forward!
Haste haste agaat jah!	Slowly, slowly, move forward!
Hoy hoy janelé hoy hoy bujelé,	Hoy hoy, you know, hoy hoy you understand,
Amar babu agaat jah!	Our babu moves forward!
Haste haste agaat jah!	Slowly, slowly, move forward!
Oh dhaat! soigum! soigum!	Oh stop! turn! turn!
Oh pishu! ... Agaat jah!	Oh Stop! ... move forward!
Hoy hoy,	Hoy hoy,
Haste haste agaat jah!	Slowly, slowly, move forward!
Sida maya agaat jah!	Continue straight, move forward!
Bate bate agaat jah!	Softly, softly move forward!
Dire dire agaat jah!	Quietly, quietly move forward!
Haste haste agaat jah!	Slowly, slowly, move forward!
Kan melé enebi, suku mele sabi	Give your hears, open your eyes
Haste haste agaat jah!	Slowly, slowly, move forward!
Baté, baté agaat jah!	Softly, softly move forward!
Sida maya agaat jah!	Continue straight, move forward!
Ohh daat! soigum! soigum!	Oh stop! turn! , turn!,
Oh pishu! hoy hoy	Oh Stop! hoy hoy
Kan melé enebi, suku melé sabi	Give your hears, open your eyes

Table 2: Lyrics and transcript of the second chant.

Contrary to the first chant, whose language and lyrics are primarily used to accustom the animal with the human presence, the lyrics sing in the second chant refers to a performative language. Lyrics are a shorters, verses based on the enunciation of the basic commands (such as *agaat*, *pischu*, *soigum*, *dhaat*) arranged in couplets. Whenever a command is addressed to the animal within the chant, the trainer invites the elephant to perform the mentioned actions ("move forward", "stop", "turn around", etc.).

Again, contrary to the first chant, the enunciated appears less descriptive than pragmatic. In this case, the lyrics refer to what French linguistic François Recanati (1982) defines as a declarative speech, the words (i.e. the commands) are less pronounced to say something than to act and to do something. Here more precisely to make to do something. Lyrics here act effectively and efficiency on the animal behaviour: when the elephant moves forward, the corresponding command is mentioned in the verses ("*agaat jah*"), when the trainer asks the animal to make a turn he includes the associated command ("turn") in the

chant; again, before starting over from a point to another, the trainer invites the animal to mark a short pause saying "*pischu*" (stop).

At first one can consider that words efficiently act on the animal. But in fact the situation seems subtler since this is obviously rather teaching the meaning of words to the elephant than to act according to the addressed command. For example, it is said to the elephant to "go ahead" when he is already moving forward, and so on for the other verbal commands. As for the first chant, verbal commands are addressed on injunctive form in the imperative present tense.

The rhythm of the melody is soft. Nevertheless, when the trainer pronounces commands, he modulates his voice and uses a longer and stronger intonation: at this time, he is no more singing but talking to the animal. For example, the verse that invites the elephant to move forward must be repeated several times before reaching the learner the appropriate conduct. The rhythm of the melody drives the elephant, and the verbal command "agaat" is addressed with emphasis. In this chant, each verse always ends also by a particular command followed by sounds (onomatopoeia).

Thus, this second chant falls into a "spoken-song" (from original German language *Sprachgesang*), at the intermediate between the act of speaking (the interjections of commands orders) and singing (the melody and lyrics). The tone is stronger, and the rhythm is getting longer when the trainer pronounces a command ("*lahé lahé agaat jah!*"), while the melody remains soft once the animal performed the said command. There is a strong difference of the voice and sound when the mahout is singing, and when he is asking the elephant to do something. Within this second chant, if the melody allows keeping the elephant attentive, it is however, by use of voice (speaking strongly and imposingly), that trainer transmits vocal commands to animal.

Moreover, during this step, some extracts of the first song ("*hoy hoy*, you know, you know *hoy hoy*") are inserted at the heart of the second. The trainer re-uses words already known by elephants as to revive and capture the animal's attention. Like in the first song, this second chant serves to mark time for the animal. By introducing words and lyrics already known by the animal the trainer invites the elephant to progress in his socialisation, to mark a "before and an after". Later on, this chant is still employed by mahout in their day-to-day activity with their pachyderms to remind them their condition of village elephants.

In the final phase, when the animal is alone, more than gestural contact or voice, these two channels of interaction (tactile and vocal), which are simultaneous solicitation to achieve the desired action. The verbal command is always accompanied, supported, by a gesture on the corresponding body part of the elephant. Thus, if during the first step the melody has had a socialisation role – in particular the habituation of the animal to the human presence – in the second step, the chant is part of the apprenticeship process in which the elephant learns commands.

Conclusion:

Music as a support of attention and interaction between humans and elephants

Music produced in the form of chants sung to elephants accompanies both humans and elephants throughout the two steps of socialisation. These chants are initially used to enter into interaction with the animal. Whenever a training session starts, the human puts his hand on the elephant's body while he begins to recite the chant.

In the first chant, we shall retain especially the importance of musical sounds (the same intensity, the same pace constantly repeated), the register and specific onomatopoeia address to elephants ("*hoy, hoy*"). This way, human intend to implement a unique way of communicating with the animals still wild and to make it docile. Gestures (tapping and

vigorous petting) supplied with the song are made here to reassure the animal, to express tenderness and affection. For cons, the use of stick employed to hit the animal, including his trunk, serves as a coercive means.

In the second chant, instead, the lyrics more closely resemble training techniques, in the sense that it is the combination of the words (orders and injunctions) and gestures that accompany them which allows these techniques to be efficient and the human trainer to achieve the desired result. Moreover, we have noted in this second chant some excerpts from the first one. Throughout their partnership it also occurs that the Khamti recite this chant again in their routine with elephants. When the mahout gives his elephant bath, for example, or during the implementation of common tasks, I happened to see that if the animal does not want to cooperate or seems unmotivated to the task, the mahout hums this chant again as to capture his attention. As already mentioned, the apprenticeship includes the assimilation of time and appeal to the memory of the individual. It seems here to be the role of chants in elephant's socialisation. Through the practice of reciting chants to elephants, voice can be considered both as a tool and as an integral part of this process. Chants thus carry an educational function for the animals.

The interaction is organized around the chants, which become the support of attention between the Khamtis and elephants. Chants are clearly distinguished from orders and commands pronounced within them. Now if we consider voice as an intangible ideal tool for communicating with animals – as is the case in "*briolage*" songs for the conduct of animals in Ireland (Griffin-Kremmer, 2001) or in Slovenia (Smerdel, 2008)- then, the intonation is getting essential. As regards order and obedience, it is first by voice, high and imposing, that human seeks to be understood by pachyderms. The lability of the human voice allows to change the modes of expression of each command to make the elephant understand the requested task (correctives means will be used if it fails). Thus, the voice (commands) clearly distinguishes from the song (lyrics). Moreover, paralinguistic elements (sounds, onomatopoeia) are all the more important to supplement voice and lyrics to be understood by the animal.

Once the two steps the transformation of a forest elephant into a village one is completed, the animal will share his life with other village elephants and the mahout assigned to him. He will then become a part of the village community, and be protected by the household spirit of his owner. At that time, he becomes akin to human in their interiority (Lainé, forthcoming). No special task will be requested to the elephant, until he reached his adult size (around 10 years). The shared life between a village elephant and his mahout is then a long mutual socialisation. The mahout will be in charge of caring, assisting, and feeding him. Their daily activities, especially bath time, are opportunities to strengthen their bonds.

References

- Baruah, P. "Elephant capturing in North-Eastern India", in N. Namboodiri (ed.), *Practical elephant management: A handbook for mahouts*, Trissur, EWA, 1997, p. 84-101.
- Bertrand, G. *À la recherche des éléphants sauvages*, Paris, Hachette, 1960.
- Bist, S.S. et al. "The domesticated Asian elephant in India", in I. Baker, M. Kashio (eds.), *Giants on Our Hands : Proceedings of the International Workshop on the Domesticated Asian Elephant*, FAO/ RAP publication, 2002/03 : <http://www.fao.org/docrep/005/ad031e/ad031e0g.htm#bm16>
- Emourgeon, C. *Les Usages et représentations de l'éléphant en Thaïlande. L'Animal, le Patrimoine, le Symbole*. Paris : Université Paris-Ouest Nanterre-La Défense (thèse de doctorat en ethnologie), 2010.

- Fiasson, J., *Au Laos avec mes hommes et mes éléphants*. Paris : R. Julliard éditions ("Collection Sciences et Voyages"), 1961.
- Giles, F. H. "An Account the Rite and Ceremonies Observed at Elephant Driving Operations in the Seaboard Province of Lang Suan, Southern Siam", *Journal of the Siam Society* (25), 1932, pp. 153-214.
- Government of India, Arunachal Pradesh: Data highlights: the Scheduled Tribes, Census of India 2001: www.censusindia.gov.in/Tables_Published/.../dh_st_arunachal.pdf
- Griffin-Kremer, C. "Bovine Bodies and the domestication of the human mind", in L. Del Giudice, G. Porter (eds.), *Imagined States*, Logan, State University Press, 2001, pp. 167-92.
- Houel, J.-P.-L.-L. *Histoire naturelle des deux éléphants, mâle et femelle, du Muséum de Paris, venus de Hollande en France en l'an VI*, Paris, Museum National d'Histoire Naturelle, 1803.
- Imberty, M. "Le bébé et le musical", in J.-J. Nattiez (ed.) *Musiques. Une encyclopédie pour le XXI^e siècle*. vol.2, Les savoirs Musicaux, Paris, Actes Sud / Cité de la Musique, 2002, pp. 506-23.
- Lainé, N. "Why did the Khamti not domesticate their elephants? Building a hybrid sociality with tamed elephants", in J.D. Vigne, Stépanoff C. (ed), *Rethinking domestication: Biosocial approaches to hybrid communities*, NewYork: Routledge (forthcoming 2017).
- Lainé, N. "Building a transspecies culture: anthropological look at the (non) domestication of Asian elephants, In J.D. Vigne, Stépanoff C. (ed), *Rethinking domestication: Biosocial Approaches to hybrid communities*, NewYork: Routledge (forthcoming 2017).
- Lainé, N. "Conduct and Collaboration in Human-Elephant Working Communities of Northeast India", In Locke P., Buckingham J. (eds.), *Rethinking Human-Elephant Relations in South Asia*, New Delhi: Oxford University Press, 2016, pp. 180-205.
- Lainé, N. "Pratiques vocales et dressage animal. Les mélodies huchées des Khamtis à leurs éléphants", In Bénard N., Poulet C. (eds.), *Chant pensé, chant vécu, temps chanté : Formes, usages et représentations des pratiques vocales*. Paris : Éditions Delatour, 2016, pp. 187-205.
- Lainé, N., *Vivre et travailler avec les elephants. Une option durable pour la protection et la conservation de l'espèce. Enquête sur les relations entre les Khamti et les éléphants dans le Nord-Est indien*. PhD in Ethnology, University Paris-West, 2014.
- Locke, P., "The ethnography of captive elephant management in Nepal: a synopsis", *Gajah*, n° 34, 2011, pp. 32-40.
- Lorenz, K. "Vergleichende Bewegungsstudien an Anatiden", *J. Ornithol* n° 89, 1941, pp. 194-293.
- Moran, D. *Moran-Matak Samaj Sanskriti. A collection of Essays on the Socio-culture and Religion of the Moran-Matak Tribes*. Tinsukia : Bengmora Prakasthan, 2007. [in Assamese].
- Oo, M. Z. "The Training Methods Used in Myanma Timber Enterprise", *Gajah*. n°33, 2010, pp. 58-61.
- Panicker, K.C. "Handling of elephants", in N. Namboodiri (ed.). *Practical Elephant Management: A Handbook for Mahouts*. Thrissur: Elephant Welfare Association, 1997.
- Plion-Bernier, R. *Fêtes et cérémonies de Thaïlande*. Bangkok: Assumption Press, 1969.
- Recanati, F., *Les énoncés performatifs*, Paris, Éditions de Minuit, 1982.

Savalois, N, "Une dynamique interactive au sein de la relation homme-animal au travail: étude comparative des savoirs et savoir-faire de dresseurs utilisateurs de chien de conduite des troupeaux (le Border collie)", Master degree Thesis, INAPG/MNHN, Paris, 2006.

Smerdel, I. "Le son des mots, la voix des sons. Sur la culture de communication avec les bœufs de travail en Slovénie", *Ethnozootecnie*. n° 84, (" L'homme et l'animal: voix, sons, musiques "), 2008, pp. 49-73.

Stracey, P.D. *Elephant Gold*, Dehradun, Natraj Publication, 1991 (1963).

U. Toke Gale. *Burmese Timber Elephant*, Rangoon, Trade Corporation, 1980.

Zumthor, P. *Introduction à la poésie orale*, Paris, Seuil, 1983.

Williams, J. H. *Bill l'Éléphant*. Paris : Hachette ("La vie de la nature"), 1951. [Original title: *Elephant Bill*, translated from English by Nathalie Gara].

NOTES

[This is an updated version of the paper presented at the Bangalore conference]

1. The data presented in this chapter was collected in Northeast India between 2008 and 2010, as part of my PhD (Lainé 2014)
2. The capture of elephant is a seasonal activity held during the dry season (from October to April) Capture operations involve juvenile elephants, ideally aged from 4 to 5 years old. At that time, male elephants leave the herd to start a solitary life in the forest.
3. Interestingly, the elephant's sensibility to music is found during another important period of Khamti-elephant relationships: at the time of capturing wild elephants. Indeed, when they used to go for catching wild elephants, among the various rituals performed, the catcher always carries a small ivory statue representing a man sitting on the back of an elephant and playing traditional violin. In Khamti cosmology, this man is known as Utingna, (part of the pre-Buddhist pantheon, Utingna the son of King of Kosambi, the ancient name for present Bihar when Gautoma birthplace). The catcher believes that the music played by Utingna has the power to hypnotise and to attract wild elephants, thus, by bringing this statuette with them, wild animals could then be easily caught.
4. Several local populations are considered as experts in elephant in Northeast India. It is the case for the Morans and Singphos population in Upper Assam, and the Rabbah in Lower Assam. The latter even use a stringed instrument (called a *ditora*) for playing music to elephants.
5. This basically simple type of structure, made of two logs in which the juvenile animal will be placed, is similar to those found in other Southeast Asian countries, in Myanmar (Williams, 1951 ; Oo, 2010), in Thailand (Emourgeon, 2010 ; Giles, 1932) and in Laos (Fiasson, 1961).
6. During fieldwork similar practices have been observed among the Morans community; this point is also mentioned in P.D. Stracey (1967).
7. Forest elephants run from fire. This well-known fact is used to prevent wild elephant incursions into fields.
8. Such beliefs are also observed among the Tai-lue in Laos. They consider that a newly caught elephant is inhabited by bad spirits (*phi phai*). To drive them out, the Tai Lue put a chicken on the elephant's back at the beginning of training. They believe the spirits leave when the chicken leaves the elephant's back. This takes place at the place of training before it begins (Laos 2015, personal field notes)
9. In Malayalam "*azhikkal*" means "to destroy".
10. In Tai, "*sai*" means "rope"; "*kho*" is the neck.
11. For a more detailed account of elephant ropes and accessories, see Lainé 2016.

E-mail: nlaine@unistra.fr