If we look closely enough—if, in other words, the cartographical scale of our examination be sufficiently large—the entire earth appears as an immense patchwork of miniature terrae incognitae. Even if an area were to be minutely mapped and studied by an army of microgeographers, much about its geography would always remain unknown, and, hence, if there is no terra incognita today in an absolute sense, so also no terra is absolutely cognita.

... Geosophy… is the study of geographical knowledge from any or all points of view. To geography what historiography is to history, it deals with the nature and expression of geographical knowledge both past and present…. Thus it extends far beyond the core area of scientific geographical knowledge or of geographical knowledge as otherwise systematized by geographers. Taking into account the whole peripheral realm, it covers the geographical ideas, both true and false, of all manner of people—not only geographers, but farmers and fishermen, business executives and poets, novelists and painters, Bedouins and Hottentots—and for this reason it necessarily has to do in large degree with subjective conceptions.

(John K. Wright Terrae Incognitae: The Place of Imagination in Geography, 1947)

Introduction
In November/December 2006, the NomadicMILK project team consisting of artist Esther Polak, philosopher of technology Michiel de Lange, and cultural anthropologist Ab Drent, travelled during one month in Nigeria. During this fieldtrip, we wanted to explore to what extend our original preconceptions fit with the reality that we would find there, whether the project plans would be attainable, and to get to know people there. This was the first phase of the NomadicMILK project. During the writing of this chapter the project is still busy with the preparations for phase 2, the execution of the project proposal that was written partly based on our experiences from the fieldtrip. The third phase will consist of the final presentation of the project on diverse locations.

In this chapter I want to address some of the central themes of the NomadicMILK project: mobility, nomadism, and technological mediation. I will try to connect theoretical perspectives and reflections with our experiences from the fieldtrip.

Mobility
One of the central themes in NomadicMILK is mobility. Following social geographer Tim Cresswell (2006: 2-3) I will define mobility as “meaningful movement”. Although mobility is often understood as the possibility for movement, it is just as much shaped by all kinds of limitations. In the classical view on space and place, which goes back to Greek philosophy, space is an abstract entity, a kind of empty box. When people create and experience meaningful positions in space, you get places. Place in this view is “lived space”. Philosopher De Certeau reverses this idea. According to him, space is not abstract but very personal and constructed. Space, he poses, is a “practised place” (1984: 117). By moving people create out of predefined (“produced”) places new spaces for themselves. De Certeau gives the
example of walking through the city, an activity he sees as potentially subversive as soon as people develop tactics to move however they want and go against the super-imposed strategies that prescribe ways to use space. Mobility then becomes a way to create room for the development, experience, and expression of identities. One of the questions in NomadicMILK is how mobility plays a role in the (economic) identities of the participants, both Fulani and Peak Milk distributors.

How does mobility appear in NomadicMILK? Sociologist John Urry makes a distinction between four kinds of travel (2000: 49-76). Although in practise they may be hard to distinguish, I will apply this analytical distinction on our experiences so far, in order to make the theme of mobility in NomadicMILK more tangible.

The first kinds of mobility Urry distinguishes is physical movement of objects. Mobility of milk is the “white line” throughout the project. Both Fulani products (fresh milk and nonno, a kind of yoghurt) and Peak Milk products (condensed milk in cans and milk powder in bags) are in fact a temporary form in a chain of products and their travels. On the side of the Fulani, the milk finds its origin in the movements of the grazing cattle and herdsmen. Esther explained to Fulani families we met during the fieldtrip that in the Netherlands, the fodder is brought to the cows, while in Nigeria the cows are brought to the food. Other product mobilities are also part of this chain. When the owner of a hers want to know how his cows who may be 15 day trips away are doing, he will send someone on a motorbike, explained the son of one of the families we made contact with. Those bikes are mostly imported from China. Increasingly, he says, mobile phones are used, coming from Europe or Asia. Another kind of product mobility is the travel that medicines make that are applied to the cattle.

The Fulani milk is brought to nearby markets most often as nonno in calabashes by Fulani women. The nonno is most often eaten at the spot. There are also people who buy fresh milk from Fulani and bring it home.

At the Peak Milk side, the chain consists of cow milk from Poland, New Zealand, or the Netherlands, which is sold on the world market in the form of powdered products, shipped to the harbor in Lagos, Nigeria, loaded onto trucks and driven to the Peak factory in the neighborhood of Ikeja. Here it is processed along a chain into canned condensed milk or powder milk bags. In the factory the raw milk products and the wrapping material are processed to become the final products. Big trucks bring the cans and bags to large distribution centers throughout the country. With smaller trucks Peak Milk is brought to smaller distribution centers. From here the products go to wholesale traders. Intermediary traders pick up boxes full of Peak products and bring them to their smaller storage facilities. Small traders buy small quantities from them, often a few cans or bags at the time, and offer them for sale at markets. The products are often consumed in tea, either at home or in roadside stalls. Finally, Peak Milk cans often find a second life. They are recycled or used as domestic items (storage can, cooking can) or possibly used for child’s toys.

Second is the physical travel of people who are involved in both milk economies. At the Fulani side the herdsmen bring the cows from grazing ground to grazing ground (although often the cows herd themselves and herdsmen only follow!). These mobility patterns vary from daily tour in the vicinity to journeys that can last many months during seasonal changes. Herdsmen themselves also travel in search of medicines, although according to one of the veterinarians we met they
often return with fake medicines. Veterinarians travel to the herds to inoculate the cattle. The Fulani women travel to nearby markets. Customers also travel there to buy the milk products. At the Peak Milk side again there is a whole chain of people who physically travel. In Nigeria we have met the Captain of Apappa Harbor in Lagos, the trucker who brings the shipments to the factory, people who work in the Peak factory and operate the machines, truckers who transport the goods, wholesale vendors, intermediary traders, sellers and buyers. Another physical mobility is that of the NomadicMILK team itself. In a “making of” film, the project pays attention to the way the project itself comes into being and what kinds of mobility patterns are needed.

Virtual mobility take place within a more or less closed system. Although Urry is mostly referring to the immaterial movement within digital worlds, I believe this idea of virtuality is also applicable to NomadicMILK. The traditional nomadic lifestyle of Fulani may be called a virtual system in which mobility plays an important role as a survival strategy. This is however a dynamic system that is open for change, such as the use of new transport- and communication technologies. Apart from this, there are many external influences that change the system of nomadic lifestyle patterns, such as population pressure, sedentarisation, climate changes, ethnic tensions, political and juridical changes. Likewise, this virtual kind of mobility can also be applied to Peak Milk distribution. Although very local, Peak operates within a mobile global market structure. Just like Fulani herdsmen, Peak has to adapt to changing circumstances. NomadicMILK exposes these two ‘virtual economic systems’ of traditional nomadism and global nomadism by juxtaposing them in their local context in Nigeria. I believe it is useful to apply the idea of virtual mobility to these dynamics because it makes clear that nomadic lifestyle as an economic system itself is constantly on the move. One aspect of NomadicMILK is to show the flexibility and adaptability of nomadism.

Finally, imaginary mobility, probably the most intangible of all mobilities. At this point, the public itself become participants in the mobility patterns that NomadicMILK visualizes. In the presentation of the project, movements by the audience are important. The audience embark on an imaginary journey along the routes of Fulani herdsmen and Peak distributors. During the final presentation in a museum setting, the audience will be invited to walk part of the scaled routes of the participants which are drawn on the ground by the sand robot.

There is also a second kind of imaginary mobility. In advance, western and Nigerian audiences will have an image of how nomadic people live and how a global economy works. The project shows how this happens nowadays. The possible discrepancy between imagined preconceptions and actual visualized reality (which is also dynamic) invites the audience to make an imaginary movement from their preconceptions to the reality shown by the project. When the audience adjusts their own images by means of the project, they will have made an imaginary travel themselves. In a sense they have become nomads themselves when they understand that their preconceptions as well as the reality show by the project is not but constantly becomes.

nomadism

Nomadism is another central theme of the NomadicMILK project. In his book “On the Move” (2006), Tim Cresswell argues that mobility has become a root metaphor
for contemporary understanding of culture and society. According to Cresswell, there have been two conflicting views on mobility and nomadism, which he calls the *sedentary metaphysics* and the *nomadic metaphysics* (ibid: 26). "Sedentary metaphysics" is an outlook on the world that implicitly takes fixed existence as the norm. This outlook sees sedentary life as rooted, stable, safe, orderly, and rational. Mobility on the other hand, and especially nomadic people such as gypsies, wanderers and vagabonds, symbolize chaos, disruption, fear, and a threat to society’s order. Contrarily, the “nomadic metaphysics” is an outlook that attaches many positive connotations to mobility. It is progressive, exciting, contemporary, and anti-establishment. Rootedness, things static and bounded on the other hand have negative connotations of being reactionary, dull, and of the past. Cresswell’s work is important because it shows how mobility and nomadism are suffused with symbolic connotations and values.

One of the dangers that looms over NomadicMILK is that it may be understood from *within* either one of these metaphysics. Seen from the sedentary perspective, the project may appear an attempt to capture a lost way of life, or an adventurous “search for the last nomads in Africa”. Seen from the nomadic perspective, the project may all to easy appear to hook into the celebratory attitude towards (neo-)nomadic lifestyles, as a metaphor for post-modern identities and actualities, even more so because of the use of new media. We can already imagine some of the audience thinking: doing something with nomads, mobility and technology is so “now”…

NomadicMILK balances between these two poles. The project hopes to offer a view on actual current day nomadic lifestyles, and show its flexibility and adaptability. Visions about the rural for instance have often connotations of being ancient, unchanging, stable and rooted. The rural has been opposed to city life, which is hectic, fluid and mobile. NomadicMILK shows that life in rural areas too is forever in flux. New economic strategies are continuously being invented and applied, and changing circumstances integrated into so-called "ancient" lifestyles like nomadism. Considering Peak Milk distribution as a form of global nomadism underlines this.

One of the criticisms of nomadic thinking is that it is only metaphorical and says little or nothing about nomadism as an actual way of life. Nomadic thought therefore also easily slides into overly romanticizing nomadism, while paradoxically pinpointing real nomads into a fixed role. We found an interesting phenomenon during our first fieldtrip. When farmers had just finished harvesting their crops (corn, sorghum or millet), they were happy to have Fulani cows come onto the field and graze off the cuttings to the ground. This saves the farmers a lot of work preparing the land for another yield. Moreover, the cow droppings are also an excellent fertilizer. For the Fulani, this proved an easy way to graze the cows in the vicinity of their (semi-)permanent settlements without having to move far. This cooperation between sedentary farmers and (semi-)nomadic Fulani shows that this sedentary-nomadic opposition is - at least in this case - only theoretical. In Nigeria we have found that they exist in addition to each other, in relative harmony. Maybe some actual knowledge about contemporary nomadic life can move nomadic thought ahead?

One funny kind of association we had ourselves on our fieldtrip was the parallel between the project and a kind of ‘taming’ of the Wild West. The first was the
connotation of the country Nigeria as a kind of wild territory. Nigeria has a bad reputation for being lawless, corrupt and dangerous, a place few people dare go, yet abundant with opportunities, e.g. for doing beautiful art-science projects! The second association was the use of new technologies to tame and domesticate this unexplored terrain. GPS and mobile technologies are used to map and order into scarcely known ways of life, somewhere far away from “civilization”. A third association we felt was between the participants themselves and mediated icons of the Wild West. Fulani herdsmen are like the cool cowboys from western movies, while Peak Milk truckers are the archetypical rough road warriors as depicted in film genres like the road movie and the trucker movie. We realized ourselves how our own views of their ways of life immediately had been colored through the prism of mediated knowledge of ‘elsewhere’ and ‘another age’.

At the risk of falling into the trap of celebratory ‘nomadic metaphysics’, some last words on “nomadic thinking”. Our world has become more mobile, or at least appears to have. So do our ways of knowing the world: “weak thought” or “nomad thought” is willing to transgress academic disciplines (Cresswell 2001: 45). Is this sense, the project NomadicMILK as an art-science collaboration, can be seen as a contemporary metaphor for cross-boundary understanding of various disciplines. Art, science and philosophy meet and move together.

**Technology and mediation**

How do new media help to create 'a sense of place' and make it visible to an audience? This project makes extensive use of technologies. GPS (global positioning system) devices are used to record participants’ routes. Possibly hi-quality mobile phone cameras will be used by participants to record their own audio-visual media and organize their mobility patterns. An automated drawing robot will 'print' routes in the landscape and show them to the participants, as well as show the routes to audiences. Film is used to record comments of participants, and to show the making of the project itself. Projections show this filmed material to audiences. The internet (web) is also used to show results, as well as a way to collaborate between all people involved.

Let’s consider a number of mediations that occur:

- GPS, mobile technologies and the robot mediate between the implicit experiences and knowledge of the landscape and routes of the participants, and making them public. Both Fulani herdsmen and Peak distributors will move and collect GPS tracks, and possibly also their personal impressions of the routes in photos, sound and video. These are then shown to them with the request to tell about what they see. So technologies are used in the project as a narrative medium, exposing what was formerly not visible, and asking people to make their implicit knowledge explicit.

- GPS and mobile technologies mediate between different levels of awareness about mobility and place amongst the participants involved. A heightened awareness of one’s own mobility is likely to occur as a result of using technologies. These moments are extremely interesting. Film is used to capture these moments of increased self-reflectivity.

- The presentation (robot, GPS tracks, video) mediates between (“native”)
knowledge and ("western") audiences. How can we transfer the knowledge of the participants and show it to other people? Here, new technologies with their 'realistic' language and tactile properties of specifically the robot track, can translate and transfer the experiences and narratives of participants to a wider audience.

The presentation mediates between the implicit and very dominant preconceptions audience have of mobility and nomadism, and of Nigeria, and a willingness to 'move' as an onlooker, to acquire new understanding of the current (economic) reality. In a very real sense the project challenges the audience to embark on a nomadic trip as well, both physically (partly walking the same scaled route) and imaginary (a transgression of their 'sedentary thinking' into new regions). The project hopes to move people into new directions.

Finally, it should be added that the project team is very much aware that the use of very modern new technologies in a project that takes place in Nigeria and depicts a way of life that is generally regarded as 'from another time' is likely to increase the perception and impact of the project. Probably there are people who think it is questionable to introduce new media in this context of African nomadism. Such a view however implicitly denies the participants involved the power to shape technologies in their own ways. We want to show the inventiveness with which nomadic Nigerians adopt and adapt innovations. Rather than seeing them as victims - powerless people subjected to the outside influence of technologies - we like to show their creativeness and flexibility.

Concluding, using new media can be said to mediate between what the producers of the project want to show, and expectations of the audiences. Media are not a gimmick to evoke a ‘shock-effect’ ("Look at those African nomads play with hyper-modern technologies!"), but a means to question preconceptions. Locative media in this project will therefore not only convey a sense of the 'other' localities, but just as much our own. Bridging gaps between different localities (here - there, they - we) and modalities (it's like that - what's it like?), we turn locative media into interlocative media.

Literature:


