



FOLLOW
YOUR
NOSE
in the Alpine
Smellscape

SOMALGORS74

Jeroen van Westen - Karina Hendriks - Thea van der Geest



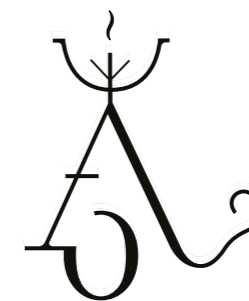
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SOMALGORS74 is an independent cultural initiative engaged in processes of collective creation; it defines itself as a platform for exchange. All the activities aim at addressing content that is meaningful to the village, its environment, its past and future. SOMALGORS74 wants to emphasize that a human being can act tapping from a rich source of observations and thoughts. It is from this abundance one can contribute to a community. Since summer 2016 cultural projects are set up in the village, its public space, as well as the alpine landscape. Many in cooperation with residents of the village, but also with regular visitors, some in collaboration with 'experts from outside'. In order to inscribe these activities meaningfully in their local contexts and societies, both art- and design strategies are used.

The Archive of Alpine Olfactory Memories, is a project that focusses on the sensorial mediation of the alpine habitat; the entanglement between landscape and its human and non-human inhabitants. Initiated by SOMALGORS74, the Archive collects scent related stories on alpine environments, told by its people and related to their changing way of life. Of all the human senses that mediate our relation with the environment, smell has the strongest capacity to evoke embodied memories and stories. It is the Archive's goal to discover, to preserve and to re-assemble those scented memories; to distil smells, and sculpturally re-materialize them into tangible 'stories/objects/products/artworks' that may reveal what those smells mean to us.



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INTRO

Of all the human senses that mediate our relationship with the environment, smell has the strongest capacity to evoke embodied memories and stories. But how to discover, preserve and re-assemble these scented memories? How to distill smells and sculpturally re-materialize them into tangible stories, objects, products or artworks that reveal what smells mean to us? Just follow your nose and come to your scents!

That this is not as simple as it sounds is made clear in Follow your Nose, a report by “nosy” visitors of the Swiss Alps, in 2020, of their individual and collective smelling experiences in the mountains and the valleys. Follow your Nose is also a “How To” – a guidebook explaining how to improve your ability to smell, and how to find the words, images, colors, feelings, maybe even sounds that capture your smelling experience. Follow your Nose will help you to discover the unexpected: your ability to communicate to others what exactly it is that is hitting your nose.

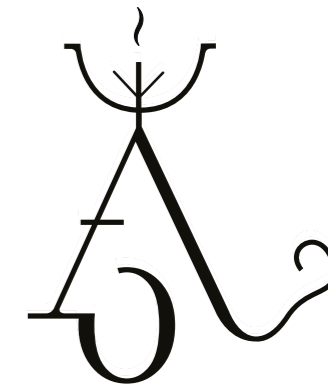
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“Die heutigen Wälder sind ein Kulturerbe, ihre Artenzusammensetzung widerspiegelt jahrtausendealte Wirtschaftsmassnahmen.”

(magazine: *AS, Menschen in den Alpen*, 33.2010.2, p 14)



The Alpine Smellscape

The project Follow your Nose is first of all about learning how to discover the landscape as a dynamic smellscape. The landscape is an olfactory panorama where smells originate, refresh, and follow the rhythm of the day, the seasons, the life cycles of plants and animals. We can use our nose to orient us in those micro scenscapes and train our noses to smell on ‘deeper’ levels. But are these scents in the landscape there to address our human noses? Do flowers smell for our sake? Essential oils are a plant’s defense system against insects. The pollen’s sweetness aims at attracting insects. By becoming more sensitive towards our sense of smelling in the landscape, the project creates awareness that by smelling we tap into the communication and interaction of other species.

An olfactory panorama

Welcome in Tschlin, a small village in the Swiss mountains near the borders with Italy and Austria. One mountain range, three nations, one cultural history. One nature, one culture? Are we looking at a living culture in a natural landscape? Until thousands of years after the last ice age it were mostly geology and climate that set the conditions for vegetations and other life forms. The Alps had been visited by people before, certainly in between ice ages, but those hunter gatherers didn’t change the conditions much. It is in Neolithic times that agriculture develops, that people influence the natural conditions. Fire was an important instrument, first to open up forested areas in the valleys, later also higher up to manage fields.

Every landscape in the world has a comparable cultural history. Dealing with the natural conditions humans developed a way of life that more, or less, fitted the situation. That is, up till the point they had to move on. Either because of climatological change, or being too ‘successful’ and confronted with overpopulation.

Clive Ponting is one of the first who has tried to look back into the history of cultures from an environmental point of view. In *A Green History of the World* (1991) he sketches an interactive process in which the human factor has grown. Sometimes new ways, new instruments, new technologies were on first sight successfully developed to counteract changes; in hindsight, other natural changes were invoked, often leading to insolvable problems for a culture and thus to its ending. Nature recovered and new cultures evolved.

At this point in time, any landscape is influenced by human culture. One could say landscape is a dynamic result of the interaction between natural conditions, processes and human culture. Therefore, if we look at the mountains around us, we are looking back into millions of years. The river down below is only tens of thousands of years old, the fields and the alms are likely thousands of years old, the houses in the village hundreds of years, and if we look at ourself we have to count in decades, and for our cars, in mere years. Every landscape is a complicated multi-layered timescape, it is a physical form of our cultural memory. If we want to understand “*Man’s role in changing the face of the earth*” (ed. William L. Thomas Jr, 1956), we should consult a landscape.

A landscape is legible, but not a self-explicatory book; we have to work to understand it, and our senses are the first and foremost tools to use. How to see what you don’t know.

The moment we store information, it will navigate the next time we encounter a (similar) situation. This is the learning curve, this is the building experience; yet the involvement can also have a narrowing effect. Open exchange is important to prevent the loss of our critical self in a dead-end street. Therefore, we should never rely our own perception only.

Legibility*

Landscape quality has been conceived as the legibility of the landscape, i.e., the degree to which a landscape shows particular expressions of coherence that help the observer to familiarize himself in both time and space. Researchers defined four perspectives. First the vertical coherence: the expression of local, natural properties such as soil, geomorphology and water in relief, in water elements, in vegetation and in land use. Second: the expression of functional / agronomic, ecological and hydrological relationships in the spatial composition of landscape elements and patterns: the horizontal coherence. Further the seasonal coherence: the expression of a certain time within a year in colors and forms of natural elements and human activities. And, finally, the historical coherence: the expression of a moment in history in landscape patterns and landscape elements.

In addition, we distinguish three timescales that can be analyzed separately. The ‘momentary timescale’ relates to ‘now’. Next, the cyclic timescale relates to a time span which is characterized by recurring events. The third timescale is ‘ongoing time’, which relates to a much longer period encompassing the succession of events in past, present and future. Combining the above four types of coherence and the three timescales yields an analytical framework within one can analyze and value landscape quality.



Summary p 251 in Hendriks, K., Stobbelaar, D.J., *Landbouw in een leesbaar landschap*, 2003

*Legibility”: this word was first used in connection to landscape by Lynch, K., *The image of the city*, 1960

To fully grasp legibility one needs to combine many disciplines like geology, biology, history, which would make it a tedious job. But from experience we can assure you that anyone is capable to grow into this ‘framework’.

Be out, wander and wonder. Local people are the best teachers; ask them questions, exchange stories on how we live in a landscape, why we visit, why we stay, smell, look, listen, taste, touch, why we observe, how we combine observations and memories.



Our senses are specialized organs. It is in the brain that signals from the senses become meaningful. On a conscious level, vision is our primary channel with the outer world. Oral information comes second, and way beyond are touch, taste and smell. Recent neuro-scientific research suggests that we learn continuously from all our observations. But not all senses send their signals along similar highway(s) to the brain, neither do they all arrive at the same areas, even though there are overlaps. We happen to construct a mental image of our environment from all signals we receive and use the information to predict what our senses will encounter. In fact, this is the main way we use our senses: to check our predictions. It is a very efficient way of using the computing power of our brain: only when signals enter that differ from our predictions, we are prompted to put our senses really to work. This new concept of how we are aware of our environment is brought forward in smell research, smell being exactly one of those senses many of us consider to be off line most of the time. This presents a strong recommendation to put the focus on smell as an excellent instrument for the reconnaissance of a landscape. **Focus on smell will help not to stick to the obvious, to prejudices, but to awaken 'computing power', if only to be creative in how to discuss smell.**



There is one more reason to plead for smell as a focus on our research of the alpine landscape. The landscape is full of smells we don't perceive as meaningful. **Encountering such smells and trying to 'read' them, to uncover their meaning, lead us toward a relative understanding of how other species communicate in smells** like we communicate in words. In short, it will help to shift our views, to refresh our observations, to widen our scope, to put ourselves in a different position in 'our' (?) environment. **Following our nose may teach us a new 'way of life'.**

Follow your Nose wander and wonder

Nosedive

You may be surprised to learn that humans are excellent at discriminating between several hundreds of thousands of smells, especially from different flavor components in food and drink. We do not have a good scientific explanation of how the brain makes sense of all these scents. Smells seduce or repel us, make us feel relaxed or stressed; however, we do not comprehend how the human brain creates them and gives them meaning. Perhaps, for this reason, the sense of smell is hopelessly misunderstood and often misrepresented.

(Barwich, A.S., *Smellosophy, What the Nose Tells the Mind*, p 1, 2020)



People can smell very well, but most of us don't realize it. In our daily activities we seem to rely primarily on our eyes, secondly on our ears, but our nose ...? If we do use our nose, it is when we eat, definitely not to explore a landscape. That is, we BELIEVE we don't find our way in a landscape by smell, but, do we? Can we? Some of us will have sweet memories of a fresh wind in the mountains, bringing the smell of trees, of hay, a trail of smoke, wood ...

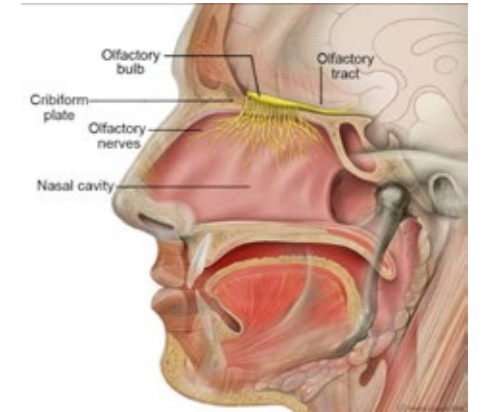


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A Modern Model for Sensory Neuroscience

The scientific history of smell is remarkably modern. Olfaction was catapulted into mainstream neuroscience almost overnight with the discovery of the olfactory receptor genes by Linda Buck and Richard Axel in 1991. Seldom has a scientific discovery shaped an entire field as profoundly as this one. Both Buck and Axel received the Nobel Prize in Physiology or Medicine for their work in 2004.

(*Smellosophy*, p 4)

Memories based on smell, root deep. To smell knowingly is hard because of our lack of words and images of smells, even though we do recognize them. It is easier when we discuss smells with others, smell with a group, and accept that each can have a different experience. Working on a scent map or calendar will reinforce the emotional bonds in our memory to this landscape. Let's block our sight and explore the landscape, and 'see' if our nose can create a 'smellscape'.



The Enigma Machine I

Entering the olfactory cortex is like walking into a vastly distributed neural firework of combinatorial activity. “What is the name of the machine that was used by the Germans?” Acree laughed. “The Enigma! You are running the input through an Enigma machine. (...) To crack the Enigma required a decoding of the encryption principles enacted by its machinery. The same idea applies to the olfactory brain and how it translates molecular bits into mental images via their ratios.”

(Smellosophy, p 244)

The image left shows the area where the signals from the smell receptors are evaluated (A), recombined (B) and sent to different domains of our brain (C).

(Golgi's stain of the olfactory bulb of a dog depicting its different anatomical layers., 1875)



Let's walk

Before the walk really starts it is good to know that a 'guide' must assist an 'explorer'. It is not easy to move through a landscape blindfolded, certainly not in the mountains. Therefore, a few rules should be observed. The explorer should hold a stick in their (right) hand, and put their other hand loosely on the guide's forearm. Explorers define where to go and at which pace. The guide will prevent any mishap.

Smell out Loud protocol instructions by an example

DIY

Jeroen (guide): “OK, I will put this mask over your eyes. After your eyes are covered, you can hold my arm and you will be safe. You are your righthanded, right?”

Jakob (explorer): “Yes.”

Jeroen: “You will carry the walking stick in your right hand. You can put your left hand on my arm here just below my elbow. This way I can prevent any stumbling. But apart from this, you are the boss, you decide in which direction we go.”

Jakob: “Will we enter the fields too?”

Jeroen: “Whatever you decide. After about 20 or 30 meters, you will probably lose your sense of place and direction. Just say if you want to turn left or right. It is all up to you.”

Jeroen: “Before we set off, let me explain a few tricks we have learned from smell explorers”:

“You can smell in short sniffs, like a dog. It is a great way to find out what exactly you are smelling. If you move your head a little bit and sniff, you will even be able to determine the direction. Most people say that with their mouth slightly open, they smell better.”



“By the way, sounds tend to be distracting. Best is to wait a second and get used to them.”

“One more thing. Outdoors, smells come to you mixed by the air streams. These distract you from smells that are nearby. It may help if you take a pause and turn around slowly, to create a 360 degree ‘scent-panorama’. It gives you the opportunity to get acquainted to whatever is in the background, sounds as well as smells. Understand?”

Jakob “I get it.”

Jeroen “We will stay on the road at first. Soon, you will be walking blindfolded without having many problems. From then on, it is up to you. We can stay on the path all the way, or you can divert. Whatever you want. Are you ready?”

Jakob “Will you ask me questions while we walk?”

Jeroen “We will not do an interview, or having a conversation. What we will do is called by scientific researchers a ‘thinking out loud protocol’. This will be the ‘smell out loud protocol’. Whatever you smell or don’t smell, tell me about it, tell me how you’re trying to detect smells.

At some point a smell may remind you of something. If so, please tell me about it. If I don’t understand what you’re saying or if you remain silent for a long time, I will ask you a question just as a prompt to **smell out loud.**”

Smell out Loud



A simple exercise may help to switch on a good smell. Inhale slowly through the nose while turning 360 degrees. The 360-degree turn familiarizes the explorer with the often rather complex over-all smell of the landscape.

As an explorer, try to 'smell out loud', try to put words to what you smell. As a guide you don't only pay attention to where your explorer is going; you can also ask open questions to check if your explorer notices something.



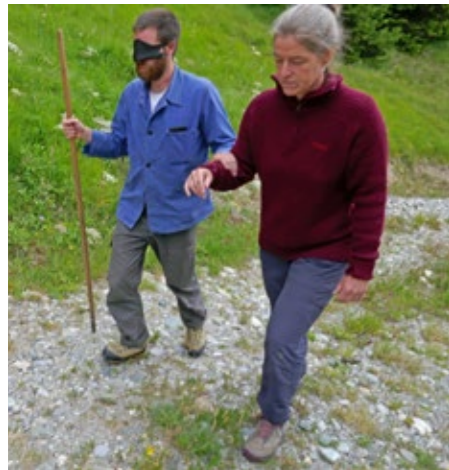
"Did I pick up a smell?" (*Jakob, explorer*)

"What do you think you smelled?" (*Jeroen, guide*)

"It was as if I exited a field and entered a forest that is really smelling strong. Correct?" (*Jakob*)

"To booster your confidence: yes, you have just passed between two pine trees." (*Jeroen*)

The act of blindfolding already changes the focus to smell:



"I've just used a bit of lip balm, I can still smell it. That, and I also do smell our sunblock." (*Thea, explorer*)

"The smell of the stick is a bit distracting. The stick smells like an old stable or, like old clothes." (*Philipp, explorer*)

"I am already smelling, I am sniffing because I feel a wind touching my skin, delivering scents. Like grass, no, not wet grass ... it's sweeter." (*Curdin, explorer*)

Does our explorer have words for a smell? Explorers best use their own words to describe their smell sensations.

"I wasn't totally into smelling yet, still learning to walk, nevertheless I smelled something sandy, dusty. Just a whiff on the draft." (*Thea, explorer*)

"Now and then it smells like nothing. Like drinking water. You know, I always think water tastes so good, but I have no way of describing how it tastes. Same thing now, it smells good, but like what?" (*Jakob, explorer*)

Does a smell evoke connotations? Memories? Feelings?

"Where does it remind you of?" (*Thea-guide*)

"It is just grass, or a note in the smell of grass. Cut grass doesn't have a single smell, there are different dimensions, Sometimes sweet, sometimes more earthy, wetter." (*Curdin, explorer*)



“Ah, here I have this smell again, only here”. [Jakob is crawling with his nose touching grass only centimeters above the ground] (Jakob, explorer)
 “You just went across the stick you had laid down when you kneeled.” (Jeroen, guide)
 “Yes, this is awesome.” [Jakob is holding the stick, moving it lengthwise under his nose] “Like a boat. And because of my hands, the stick also smells of sunblock. Sunblock and wood. It is like being on the boat, sailing with my grandfather.” (Jakob)



“The path took me up along a few trees. I smelled the resin, pine trees, and the smell took me right back to my youth, to where I grew up in a sandy, very sandy area, with poor soil. And to a forest which I loved very much, where I was lying on the ground under the trees, just to be there. A very old memory just popped up.” (Karina, explorer)

In case no clear smelling sensation can be found, the guide can suggest to briefly inhale through the nose, with the mouth just open, and the head slightly changing directions at each sniff. Maybe move the head a bit up and down, this might work.

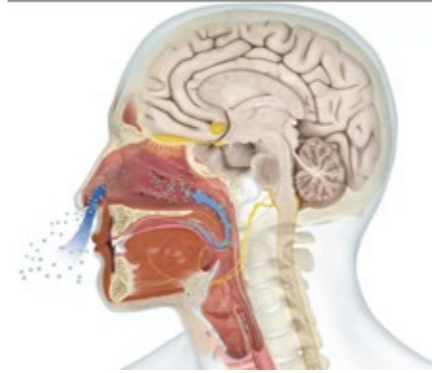


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“This is pretty exhausting, my nose starts to burn, my brain feels busy.” (Curdin, explorer)

“What about other parts of your body?” (Thea, guide)

“I smell something up front in my nose and ... in between my throat and my nose, as if there is some ... as if I suck in some air. I do get information inside my nose, but I do get more information from that space in the back of my mouth.” (Curdin)

“I do smell something like leather, a bit smokey, could be my boots. Some pine trees from behind me. My ears feel the direction of the wind. I can hear water but cannot find a smell for it.” (Thea, explorer)

Some explorers are perfectly at ease in the mountains, they are familiar with their plants and trees. They read the landscape with their feet and can detect rather easily the sources of the smells they recognize. Touching a source brings back more details.



“Funny, as I step, then stop, I can smell what I just stepped on: I can smell the grass. But if I continue walking it seems like everything is just part of an undetermined smell soup.” (Philipp, explorer)

“Now I smell something like nettles or a rather spicy plant. Can I go down on my knees? Aha, this is the one with the little white flowers. They smell like carrots, wild carrots.” *(Philipp, explorer)*

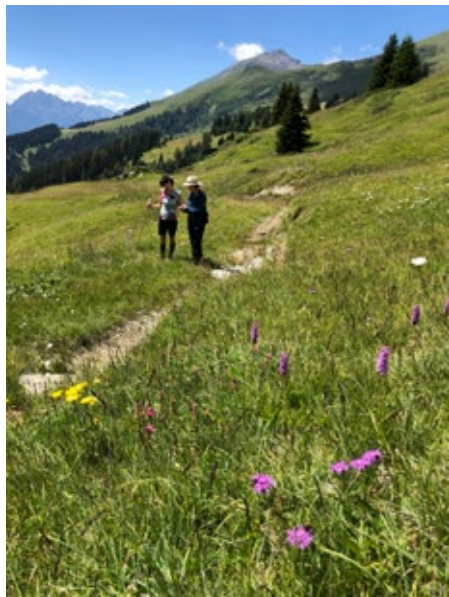
We almost have to ‘bump into’ a separate smell coming from a nearby source to realize how most of the time this complex overall smell is omnipresent. One moment leaning more towards grass, then fading to pine trees. Or can it be that if we hear something, we expect to be able to smell it?



“It is funny, as soon as you get closer to a stream, not just the sound, but also the temperature changes.” *(Philipp, explorer)*

“Where do you notice this, feel this, smell it?” *(Jeroen, guide)*

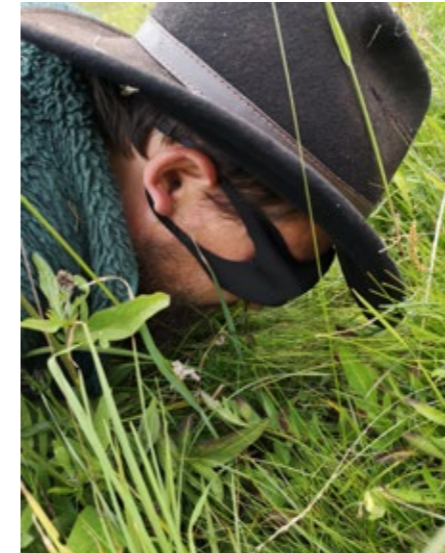
“On my hands, on my face, and in the nose. At the entrance of my nose. Yeah, it gets thicker, the consistency of the air changes near water.” *(Philipp)*



“Now I smell your shirt” [of the guide] “I feel I should bend lower to smell more. Now I just smell what the wind carries, it is gone before I know it. But lower, here, it is different.” *(Curdin, explorer)*

“Ich habe ein bisschen Wasser gehört. Ich dachte, vielleicht riecht mann ja auch ein bisschen, ja auch ... aber nicht, dass es anders oder feucht ist. Ich höre nur das Wasser.” *(Ursina, explorer)*

Here we arrive at a different level in our focus on smell. People have their nose high above the ground. By nature, we are beings of the plains, sight is prevailing. Yet, it is amazing how well people can adapt to other environments. Cultures living in dense forests rely more on sounds and smells to build themselves a ‘picture’ of what is going on. As we do have the physical tools to smell, is this “use it or lose it”, or are we all very capable of smelling, but not consciously aware of it?



“Now I understand why dogs have their nose closer to the ground, I know the smell of grass mostly from mowing grass. The mowed grass has a sharp smell, but up close it smells quite differently. There is a faint sweetness that doesn’t indicate fresh green. Oh, and here it is bitter, more like earth. If I continue, it is ... like wool.” *(Curdin, explorer)*

“Your nose is no more than twenty centimeters above the ground now.”

(Thea, guide)

“Yes, I can feel the grass as it touches my nose. It smells like sheep, almost like milk, or some kind of cheese. And here, only two centimeters farther on, it smells green. This is crazy, if I move my nose only one centimeter I smell something different, very different. Here it is ... rather foul, like pee. Here, oh this is strong, here it is like cucumber, yet pretty strong, and now ... now I smell thyme or something like that, an herb.” *(Curdin)*

“You moved only 20 centimeters!” *(Thea)*

Being blindfolded, smelling is very different. In the above example Curdin couldn’t see if what he smelled was a flower, or the soil, or the grass, or Was the pee-like smell a flower or a place where an animal had urinated? What would a dog make of these smells? Is smell a language, a form of communication? Can it be that a plant has the same smell as sun-dried urine?





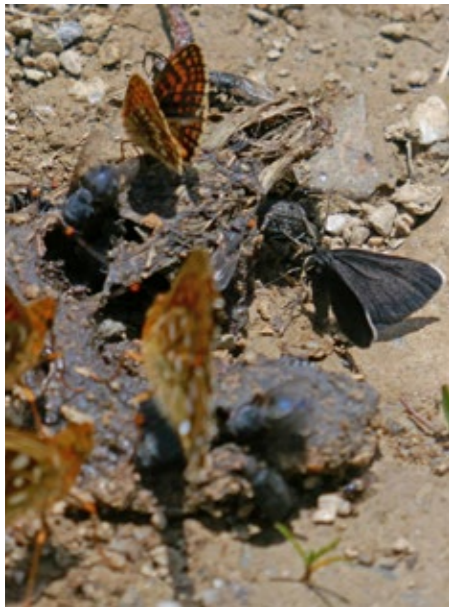
“We are walking through high plants reaching about the height of our nose.”
(Thea, guide)

“They all have flowers, I smell many flowers. Different kinds of flowers, but all flowers.” (Gaura, explorer)

“Do you recognize some? Do they remind you of something?” (Thea)

“Cupcakes with special spices.” (Gaura)

Wait a second, this is interesting. Smell and food! Yes! Easy, but not only for us. Cattle have noses too, and they definitely smell what they eat. Sheep, deer, chamois, all mammals have noses. And how do bees find a flower to suck nectar? Butterflies? Can it be that smell is a signal? If so, most smells in a landscape are not ‘meaningful’ to us human beings. Why bother to take the effort? Then again, if we do try, we might be able to see connections between plants and animals we never have thought about.



People who smell

... when travelling to other regions, the Desana (Colombia) continually sniff the air and comment upon the distinct odors of the different tribes that inhabit those regions. In fact, the Desana call themselves Wira, which means ‘people who smell’ and refers to both the emphasis they place on olfaction as a way of knowing, and their particular tribal body odor.

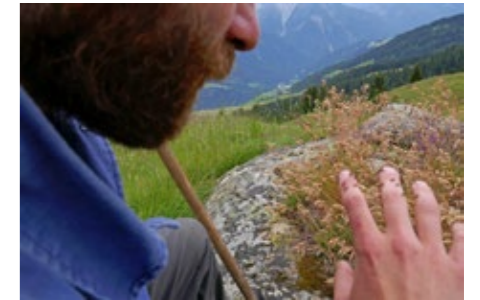
The different areas of the jungle—from deep to open forest—are also characterized by distinctive odors, according to the Desana, and the odor of the animals living in each area is thought to be conditioned by the smell of their surroundings. Thus, deep forest animals, such as the peccary and jaguar, are said to give off the unpleasant musky smell of the forest depths, while animals that live in more open spaces such as clearings, including various kinds of rodents (agouti, paca), are thought to have the pleasant, sweet smell of the open forest.

(Classen, C., a.o., *Aroma, The cultural history of smell*, p 99, 1994)



Philipp (explorer): “Ah, now I can see the ant pile we passed when I was blindfolded. Ants love these hot spots next to a rock where the heat accumulates. Often there grows juniper and thyme. And it’s ... yeah, just smell, smell this, do you smell the acid? From the ants. Their pile consists mainly of little pieces of grasses, but they also like needles. Here is a sort of entrance” [*Philipp is touching the pile*] “Look, they’re working their way into the skin” [*ants are crawling on his hands*] “They are trying to destroy, to attack. You know, usually they start shooting acid at you.”

Where the acid is the weapon, the acidic smell is a warning sign reaching farther than the weapon itself. Insects can smell. With their antennas they can feel their way in the dark, but their antennas are also clad with smell receptors. Ants can leave a scent trail to inform other ants where to find food. They exchange information by touching each other’s antennas. To them smell seems to be what spoken language is for us.



Flying ants

How do the ants know on which day to fly out and procrastinate? Scientists don’t know yet. Length of day, temperature, air humidity must be defining factors. Not that they explain everything, there must be other incentives. Could it be that future queens, already in flight, spread pheromones that attract male ants? Maybe these signaling molecules can be smelled by the procrastinating ants of other colonies, thus persuading them to get airborne. So, smell is also a direction finder. Even if you fly out together with millions of others, the air space is so gigantic that it is a real task to find each other.

(Bouma, A., *Insectenrijk*, 2020, p 13, translation Ton Haak)

Curdin: “While being guided, I realized what intimate act smelling is, actually. At some point I really wanted to know what in the air was Thea’s smell. But then of course, there is this kind of border that you don’t cross.”

Thea: “He asked me for my hand, which was pretty decent.”

Curdin: “But this brings out an ethical question: how much do we want to smell?”

The intimacy of smell

In India, the traditional method of greeting was to smell someone's head. Thus, the Vedas speak of the satisfaction fathers take in smelling the heads of their children after returning from an absence. This act was as meaningful and affectionate as a kiss or hug would be in the West. One Vedic passage proclaims: 'I will smell thee on the head, that is the greatest sign of tender love.'

(Aroma, p 114)

We too produce smells. Our sweat smells different when angry, when afraid, when in love.

Smell is a word that is used in both directions. 'To smell' can mean the emanation of molecules / pheromones like sweating. But 'to smell' also describes the actual 'registering' of free-floating pheromones. Both we do simultaneously, continuously. We produce smells and we detect smells. Mostly unaware, except when we choose our soap, deodorant, or parfum, or when the smell is warning us, for rotten food, or fire, or fear. We act upon such signals before we are consciously aware of them. That is also true for choosing our friends and partners. It is not their intelligence, physical beauty, or whatever. We are attracted by a smell, then find the person in the crowd who emanates that scent, and if lucky the other one finds you at the same moment that your eyes lock. Love at first sight ... is love at first smell.



Odor, power and society

First of all, odors are, by nature, personal and local. This enables olfactory values to be used to reinforce the tribal allegiances of post-modernity, in which the 'goodness' of one's own group is contrasted with the 'foulness' of others. At the same time, smells resist containment in discrete units, whether physical or linguistic; they cross borders, linking disparate categories and confusing boundary lines. Furthermore, smell, like taste, is a sensation of the moment, it cannot be preserved. We do not know what the past smelled like, and in the future our own odor will be lost. While odors cannot be preserved, however, they can be simulated. Commercially produced synthetic odors pervade the marketplace, enveloping consumer goods in ideal olfactory images.

(Aroma, p 213)



‘What the nose tells the mind’ debriefing individual smellsapes



Inca kinds of smelling

Mutquini

Mukacuni

Aznacuni

Mutquichini

Mucacumuni or mutquimuni

Aznachicun

Camaycuni

to smell something

to smell a good odor

to smell a bad odor

for a group to smell something together

to secretly sniff out what is being planned

to have oneself or let oneself be smelled

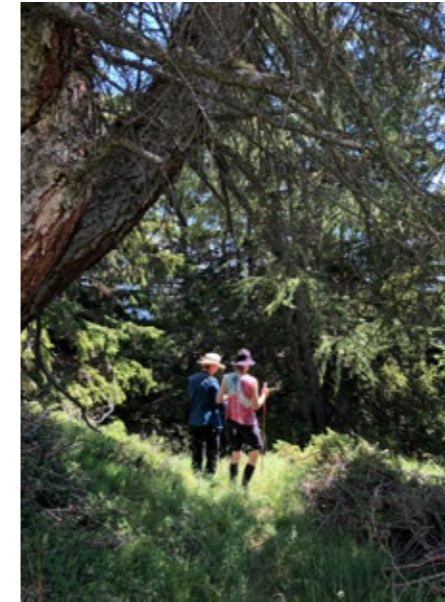
to come across a food odor, to inhale, to inspire

(*Aroma*, p112)

One of our goals is to add smell as an entry to experience a new layer in our relation with the environment, a new way to discover and to understand the landscape. The way smell can call up memories in people suggests smell can dig deep into our mind. If such a smell is encountered, often a complete situation comes back very vividly: an episode is recalled.



Jakob, explorer: “I really think it is amazing that I completely lost track of time when we were walking down the hill. It could have been ten minutes or an hour, no clue. And now I heard it was almost an hour. That’s really beautiful. You need so much concentration, but you also completely lose yourself in the smell. And I am impressed because I always thought that I have a very bad nose, but now I know differently. What I liked best was the wet soil, the soaking wet soil. I put my fingers in it and I smelled my fingers and I was really struck dumb because it didn’t smell like soil at all. It smelled strong, like flowers, but stronger. Some of the discoveries are amazing. Think of the stick, the wood with the sunscreen, I was really back on the boat with my grandpa. So nice.”



Ursina, explorer: “Oh, hier ist es Gut. Das ist einfach dieses Waldgeruch. Es ist warm, wie die Tanneboden. Ich denke an die Tannennädeln auf dem warmen Erdboden. Und dann das Holz. Ich habe dieses Bild von diesem Stück Wald unterhalb von der Hütte. Ich denke immer dass wenn ich Wald rieche, dann denke ich oft an diesen Ort unterhalb der Hütte. Ein sehr warmer Geruch. Er macht mich glücklich. Ich fühle mich sehr Froh mit diesem Duft.”

Smellsapes

Just as odors exist in time and change with time, so do they exist and change within space. In the Andaman Islands, for example, when the species of *Sterculia* flower called jeru comes into blossom, “it is almost impossible to get away from the smell of it except on the sea shore when the wind is from the sea”. Such potent floral scents make the Andamans ‘islands of fragrance’, surrounded by the salty smell of the sea. This opposition between the air of the jungle and the sea provides the Andamanese with an olfactory definition of the space in which they live. That space is further differentiated by the more localized odors of villages, dens of animals, different plant zones, and so on. Together these configurations of odors constitute the olfactory landscape, or ‘smellscape’, of the Andaman Islands.

(*Aroma*, p 97)

Smells are important enough to put into storage, even though we don’t know how exactly to reach into that storage space. Smells are not like images we can sketch or conversations we can repeat, not like a tune we can hum. There is no smell recorder, nor a smell camera. Or is there? Scientists tell us that we individually build up our personal ‘archive’ of smell experiences, not on a conscious level, but smells are automatically connected to several areas in our brain. The experience is stored in a network, meaning, it can be triggered from many different angles and will immediately take along the other connected parts of the experience. This indicates we have to give up the idea that we can copy-paste our smell adventures to surprise our friends with. But, if each personal library has so many connections, it must be possible to communicate with our friends on those adventures. Can we ‘share’ a personal smell experience of this landscape in other ways than taking the other person to this ‘smellscape’? Karina set up a small-scale experiment. She asked the participating explorers (Philipp, Curdin, Thea, Jakob, Ursina, Jeroen) to choose a favorite spot or route based on the earlier blindfolded exploration, to go there for about an hour to work on how to ‘express’ their impression of the smellscape.



Philipp created a 'map', a plate with smells he made with resources he found. If we would follow the smells in the same order as he has put them on this plate, we should get to an ant heap near a fallen tree over a narrow stream. This requires to pick up the first scent from the map, to establish the direction of the source, and when arrived at that source to pick up the next smell from the map, etcetera, until we are where Philipp wants to lead us to.



Philipp: "I thought it was kind of cool to use the same tools, the same methods as the ants do to lead other ants. Ideally, we would do this blindfolded."



Curdin used water color on a blank sheet of paper. Different color, different smell. A different intensity is more transparent. A more present smell indicates a stronger color. The size of the shapes implicates their presence, and the direction where the smell is coming from. The result reads like an abstract painting, but just like a Kandinsky original, there is this immediate feeling there is a reality behind these colors and shapes.



Ursina: "That's the picture in my mind. I really had a similar picture in my mind: waves. The smells coming and engulfing you locally. Small local smells moving away."

Curdin: "I was dealing with the problem of over-all draft and smells in the proximity. How to capture the complexity of this draft, next to other, extremely local smells. I think the most complicated problem for me was, how to express the sweetness of the orchids. All the colors look too grey actually."



Color Wheel of Old Book Smells
Spurce: Heritage Science- bit.ly/2npRK0U

The conversational drift lingered on about using colors for smells. Is a citric smell yellow? Or are the connections more abstract, like a cooler or a warmer smell would be respectively blueish or reddish. This second approach is considered more abstract by the group. We feel that the narrative, episodic associations to the smells, gets lost. This being one of the main qualities and reasons why we like to develop our nose.



When Thea showed her approach, it added another way of using color to express what smells evoke in her. Her favorite spot was a small area, of about one square meter, in which a few conditions were meeting: wet and dry, sun and shade. Each smell has its own color; the bigger surface in the color, the stronger the smell. For a smell with a chlorine note which also had something of summer and minty, she chose the colors of tiles in a swimming pool. She saw an orchid, smelled it from top to bottom, and wondered how to get away of the striking pink color of the flower. With her eyes closed, the orchid smells like a tea kettle with boiler scale that has been on the stove too long. But there is also a buttery smell. Thea decided on a caramel color for the orchid. New smells are tied to older experiences. She 'uncovered' an internal benchmark, an individual library of smells connected to very familiar places and situations that may resonate in other people too, having similar experiences with pools, tea kettles.



Ursina brings out a poster of the project, folded into an object with several pockets filled with ...? All of us say wow. In silence, Ursina opens the pockets one by one. First a pine cone, second a pine twig, more follows till her hands are full. Bringing forward her hands she opens them wide. We see a collection from the forest. She closes her hands carefully, slowly folds her arms around her body, eyes closed, head down, turning inward. When her hands reach her waist, they squeeze, what is in there is crushed.

A long, quiet silence comes from within the group.

Ursina: "I was more trying to invoke the smell in you than to bring it to you. And express what smells do to me."





Jeroen shows a similar poster of the project folded into a book, bound with grass. He is a bit frustrated. He has a bias for vision, with strong oral support. Smell is a recent discovery for him, but he cannot make his experiences sufficiently clear in his 'natural' media, nor in words. For this book he retraced his blindfolded track. Picked up materials rubbed them in the paper, rubbed the paper on a rock, dipped a page in the stream, tried to paint a twig of a pine tree for its delicious smell, and added words everywhere, on every page. "Green as a toilet refresher, turpentine as for oil painting." The cliché and the personal. Whatever he tries, it still doesn't express the experience of being here, lying down, nose in the grass, in a stream, eyes closed, with zigzag images popping up in his brains, flashes of color, no sounds, nothing communicative to others, but oh so happy with the experience.

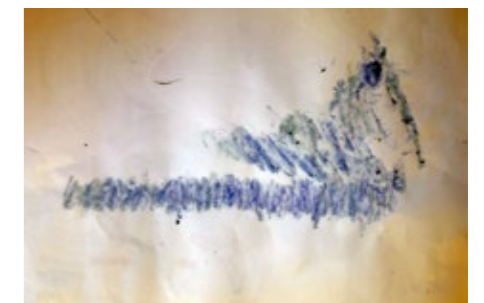
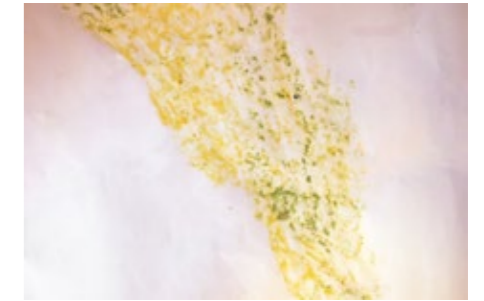
The Nose as a Window into Mind and Brain

Olfaction is a strongly evaluative sense. Perception and judgment are entangled in the experience of smell. How we encounter and learn to associate things informs how we categorize them and form value judgments. The brain is dynamic; it measures the world rather than mapping it. (...) The brain as a measuring machine shows that perception is not primarily about stable object recognition and identification. (...) Any interpretation and the potential for perceptual generalizations of such sensory measures into perceptual categories is grounded in organismal needs, experience, and learning. It is action relative as well as memory based, and must be understood with respect to the interaction of the perceiving organism with its environment.

(Smellosophy, p 303/304)



Jakob has his 'translation' of smells laid out on the bottom of the cart. Sheets of paper painted with the flowers he found while walking around. One plant per sheet. The image is more about temperature and shape. Some compositions suggest a movement, or speed, as Thea notices, but Jakob doesn't want to elaborate on that. "I could probably explain, but would that make sense to try? I would explain it with words again." Theresa, who just walked in and didn't participate in any of the explorations, wonders if the lay out of the paintings is meaningful? "Not as a composition, but they are organized like my walk." More interesting to Jakob is how fast the colors change, especially of the flowers. Are they just as ephemeral as their smells? We wonder if there is a relation between color and smell? Somewhere in this discussion we agree on the observation that stem, leaves and flower of the same plant have different smells. Flowers have a pollen sweetness, but not all through the day. We appear to feel that colors are for us a stronger differentiation between plants than smell.





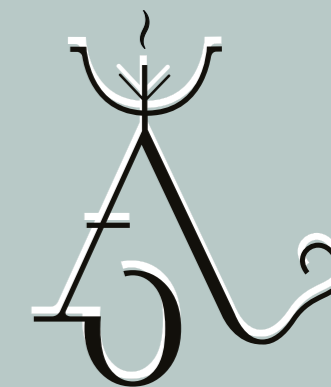
During the presentations to each other of the expression of their smell experiences, Vith and Theresa arrived. Both are working in Somalgors too, but on a different project. Vith says: **“For me it is really interesting to see how, more than representing the smells, the intensity of the affect is somehow recorded. I love how this shows there is something strong that happened inside. The force of smell.”**

Chinese cultural correspondences

Element	Odor	Taste	Color	Tone	Season	Direction
Wood	goat	sour	green	chio	spring	east
Fire	burnt	bitter	red	chih	summer	south
Earth	fragrant	sweet	yellow	kung	-	center
Metal	rank	acid	white	shang	autumn	west

The so-called elements are not so much fundamental substances as they are fundamental processes, transforming into each other in a never-ending cycle. Apart from the correspondences given in this table, to every element there also corresponds a planet, kind of weather, style of government (enlightened, relaxed, cautious), kind of grain, wild animal, domestic animal, body orifice, sensory organ, emotional state, and so on, virtually without limit.

(Aroma, p119/120)



DIY Fieldwork

Wander and wonder in the Alpine smellscape

1
DIY



Smell out Loud

Each landscape is a complex smellscape worth to explore

Quick start

- FIRST discover your own nose, and try to understand what your nose tells your brain.
You can use the `Smell out Loud' protocol to start (p 16 / 17)
- Work in duos, take turns being the guide or the explorer
- Exchange experiences in a group
- Mind the communicative value of registered smells for other living beings in this alpine ecosystem (insects, husbandry and people included).



Follow your Nose

There is more to smell than you can see

- Take a walk, pick up what draws your attention, smell a rock, a flower, a brook, a tree, and another one. Take notes.
- Follow visible tracks with your nose. describe the smell of the animal, and describe the smell you think these animals follow.
- Compare smelling up close with the 'smell soup', can you detect the up close registered smell in the smell soup?
- Find yourself the olfactory equivalent of a viewpoint. Describe the experience.
- Can you detect which smells are 'natural', of human origin: the result of human intervention, or may be a warning signal among other species?
- Don't forget the familiar smells, those are your benchmarks to 'validate' your new experiences.



Aromas of Time

In the jungles of the Andaman Islands, as one after another of the trees and climbing plants come into flower, it is possible to recognise a distinct succession of odours. The Andaman Islanders have constructed their calendar on the basis of this cycle, naming the different periods of their year after the fragrant flowers that are in bloom at different times. Their year is thus a cycle of odours; their calendar, a calendar of scents.

(Aroma, p 95)

Smell Calendar

Mapping volatile memories in a changing environment

Imagine early morning in Tschlin, waking up, the bedroom window open, curtains closed. The village still silent, no wind, no rain, lying in bed we know what the weather will be. We can smell the roses when the sun is out, the moisture when it rained over night or the sky is overcast. If you live close to the bakery, there are possibly first wafts of fresh bread.

If you are a villager, you register these smells almost without realizing. The long stay visitors slowly grow familiar with the smellscape of the village. And when they return, especially for those who do so year after year, they possibly feel a warm ‘welcome back’ upon entering the village. Even blindfolded they will recognize where they are, may be even know what time of day it is, what season. Many memories tumble over each other, a backward journey joins the present. Memories of such volatile experiences can be deeply engrained in our brain. Now that is a nice paradox to ponder on: Volatile memories.

An invitation for residents, long stay visitors and regulars

Natural History

The smell of some plants is sweeter at a distance, becoming fainter as the distance is lessened; for instance, that of the violet. A freshly gathered rose smells at a distance, but a faded rose when nearer. All perfume however is stronger in spring, and in the morning; as the day draws near to noon it grows weaker. Young plants also have less perfume than old ones; the strongest perfume however of all plants is given out in middle age.

Pliny

Several times in conversations during our summer workshop on smells, summer experiences are compared to how different it is from winter. There are differences in smells. The same walk can be tremendously different not only depending on the season, but even by the time of day!



Philipp (regular): Last year in may I was looking for the smell of winter that everybody is talking about. And I was standing below this tree where we raked the hay together today, like next to the barn, the big tree. I climbed up almost to the top and then I was in between all these mosses hanging. And it was snow around, cold dry air: that was, that is really THE smell of winter.

Thea (long stay visitor): Yesterday, I think, there was a loose patch of those mosses on the bottom. And I smelled it and they do have a very, very peculiar smell.

Philipp: Yeah, yeah. I mean, now they smell really different than in winter. And someone told me once that there is this amazing, symbiotic relationship between different species- in winter, they go in a kind of winter sleep. They produce certain chemicals that help them to not freeze. That’s why especially in winter, or in cold temperatures and cold climates, they are more fragrant.

Volatile memories

Can we map the smells, the volatile expression of what is going on in Tschlin, a quiet village in the Alps? Can we notice the changes over the years? Can we trace back earlier smellscapes through the memory of earlier experiences. Through reading the landscape?

The experience of smell is very personal, each and everyone of us creates his or her own 'library' of smells, of memories. How to cope with the individual differences is essential in any cultural study. To be able to deal with that, it is first of all important to respect those differences. Discussing those differences is a form of reflection, of growing towards a cultural understanding. Apart from individual differences in how smells are experienced there is no standardized way to map the volatile smellscape.



How to map Tschlin's smellscape?

First of all, observations of many people are essential, best over a longer period of time!

Second, there is individual freedom in how to note and write.

Taking those two points into account it is useful to agree on how to approach the art of smelling to create a common ground

Third, the reports, in whatever form, need to be added to a public accessible 'archive', open for comments.

Finally, the results and commentaries should be subject of an open debate, live, to be held in the village. trying to establish a cultural view on that particular smellscape.

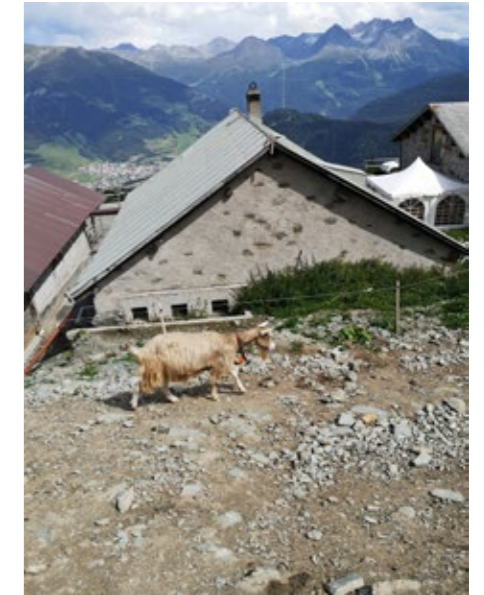


The art of smelling

The smell of a landscape, of a village, a house, is always a mixture of many, many different sources. In fact that is what we do best: memorizing complex mixtures, and noticing the slightest change in the mixture. It is much harder to 'analyze' a complex smell: to determine, to name some of the sources contributing to the mixture. Non experienced smellers generally find no more than three accurately. Trained smell experts on average five! Isn't that a surprise? Experts don't do a whole lot better! Then why do perfumers mix up to 150 different smells in a single perfume! Not only why, but also, how do they do that? They make use of the fact that we can detect minute differences between two mixtures. So, to be able to judge if one perfume is more to your liking than another, our nose does the job. To create such a rich and complex smell, perfumers use this capacity for measuring the difference, to decide on adding or taking off a component. To know what they are doing they need to familiarize hundreds of smells. Can we translate the method of the perfumer to experience and judge our landscape as a smellscape?

Curdin (resident): "Go to a viewpoint and I think you can experience year round why it is a viewpoint, even in with bad weather. Smelling points will provide extremely different smelling experiences in different parts of seasons or different weather conditions. And of course, looking at the mountainside, you could say the view is also different. But I would never experience the difference to be that fundamental. I would recognise those mountains there. Yeah. And with the smell, I think it's really different. If I were blindfolded on the same spot in winter or in summer, that would be an interesting question: would I be able to remember to localize the same spot?"

How seasonal are our days? At home? Here in Tschlin? Could it be that in summer we are more out and about in the fields, the forest, the mountains. In winter more time is spent in the house. The animals are in the village. Making a smell calendar will bring forward how we live with the landscape. Imagine just paying attention for an hour to smells in our daily life. That could be already highly informative weekly or may be monthly. Five or six people could discuss their notes, that will give a good idea on seasonal changes.



Common ground

DIY-suggestions

Accepting that any smell map is personal, it is not important that the map is geographically correct. The creation of a mental map relies on memory as opposed to being copied from a preexisting map or image. In *The Image of the City*, Lynch asks a participant to create a map as follows:

Follow your nose = activate your nose! For example through blindfolded explorations focussed on smell.

To learn to recognise or to recall a 'singular' smell, it helps if you go up close to the source.

Try to record the 'singular' smells, to store those smells by translating them into words, images, colors, music, and a feeling. This can be trained best in dialog with other smell explorers.

It may be that words that express the affective characteristics of a smell can be helpful. Words like: intimate, fear, desire, warm, disgusting ...

If a smell or a mixture doesn't trigger any recognition, it is more like an abstract painting, it can still 'move' you and bring you into a different state of mind. Give yourself time, define the impression as an atmosphere, with a metaphor, or by comparison, generally a taste.

Smell and taste are closely related to each other. In general we describe smells in words that relate to taste: sweet, sour, salty, rotten, ripe, ... We even go one step further and describe smells in fruits, it smells like lemon, orange, raspberry, acorn ...

Make it just as if you were making a rapid description of the city to a stranger, covering all the main features. We don't expect an accurate drawing - just a rough sketch.
(Lynch, K., *The Image of the City*, 1960, p 141)



Keep smelling when walking away from the source, try to hold on to the smell till it is 'gone', blended in the over-all mixture.

Follow your ears! Try to smell what you hear.

Follow your eyes! Try to define characteristic areas, materials, plants, ... and walk up to those to smell them. See if other living beings seem to look for, or to follow smells.

Check your smell experiences possibly with local people. Define in dialog what smells you picked up, and what these tell the nose of your local guide.

What causes the smell, why is that source in the village? How does it fit into the way of living.

Discuss the smells separately and in context with the location. Try to connect a (personal) meaning and/or feeling to the smell.

Can you recall a smell when not on site? Like from an alm when you are in the kitchen.

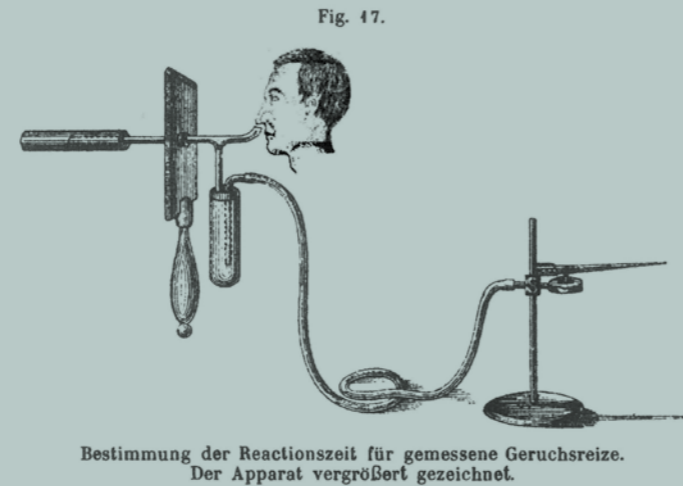
Find or create smell beacons, almost like 'monuments' e.g.:

- a 'Heinz' with a burlap tarp
- a stack of freshly split wood
- a singular smell
- a store, or a business, a farm?

Each smell has a personal and a local meaning. All these suggestions contribute to building your personal benchmark for a local smellscape. Each separate smell stored in a context becomes a story, including an image. Let's be glad with what we recognise in new contexts. Smell conscious walks will always add new smells. Most of those smells don't communicate directly to you, but you can 'follow' those smells to 'meet' other species, other ways of life in the smellscape we share with other organisms.

PLEASE REPORT YOUR OBSERVATIONS IN A FORMAT THAT SUITS YOU BEST: info@somalgors74.ch





Hard of Smelling

Design workshop for smell tools

Smells are not like images we can describe or like conversations we can repeat as if recorded, not like a tune we can hum. There is no smell recorder, no amplifiers for smell, nor is there anything like a smell camera. Or ...?

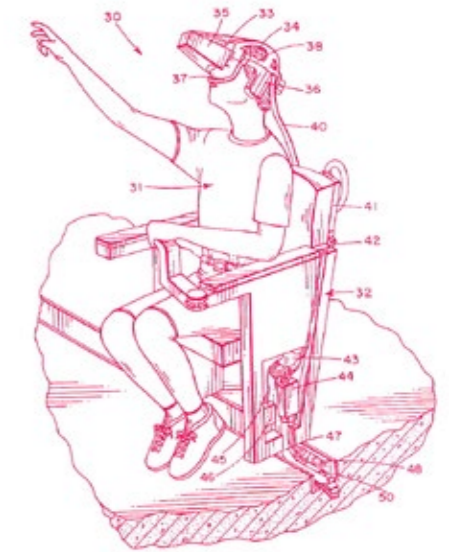


Giving notice

Why did people start to paint or sculpt what they see? A very basic, maybe too basic a question discussed by many art historians, philosophers, psychologists, evolutionary biologists. Even without an answer coming up, it is interesting to trace the evolution of depicting our sensory perception of the world up to the point of being able to create a virtual world addressing vision, audition, touch, and to a certain extent even smell.



Depicting our sensory perception of the world adds to this sensory world: paintings, wall decorations, sculptures, photos, recorded music ... and even smells. Not only in perfumes or soaps, but smells are also used to make you feel better in stores (and buy more). Smells are vaporized in offices to make you more productive, and there are smell stations for your game console ... although they cannot keep up with the dynamic virtual world.



patent for precision fragrance dispenser 1997

We have to copy an existing smell. Like, e.g., meat replacement products that have to taste like chicken. Buy a chicken at the poultry shop (not at a supermarket!). Compare the chicken to the soja replacement, how to reinforce? Test it with colleagues and adapt. We can analyze a chicken for smell using a GCO (Gas Chromatography Analysis for Olfactometric Detection), which is helpful, yet we don't know which properties of a molecule define the taste.

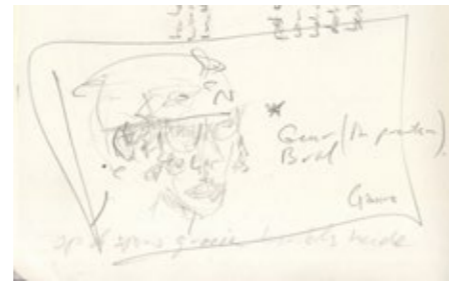
Lisa Wijnen, Flavorist Givaudan Naarden (geuren smaakstoffen voeding), interview KH



Image_courtesy_of_Nasal_Ranger™.jpg



Ear trumpet, Aubaho, advertentie Amazon.nl



Smell glasses, by Gaura

Memories based on smell, root deep. To smell knowingly is hard because of our lack of words and images of smells, although we do recognize them. But because we do store smell in our memory connected to many different areas, a smell can recall instantly a full episode. This makes smell a great entry into getting familiar with a landscape.

Smells are not like images we can describe or like conversations we can repeat as if recorded, not like a tune we can hum. There is no smell recorder, nor is there a smell camera.

This list can be expanded. We don't have smell reinforcers like there are microscopes, macro- or tele-lenses, or projectors for vision, nor like microphones or amplifiers for sound. But, think of old-fashioned hearing devices, the horn, with a narrow part entering the ear, the wider part picking up sounds ... could something similar be used for the nose?

Or, imagine, if we could imprint a smell, if we could carry a smell source right in front of our nose, like using a prosthesis for our eyes (thank you, Gaura).

Maybe we could bring the smells from the upward draft in direct contact with the smells from the ground we are walking on. A smell stick would help.

Lacking winds, maybe we could unfold a fan, or several fans.



Choose one of these tools

to smell

AND MORE

- develop the concept
- build prototypes
- test and refine
- produce
- exhibit and use it

Not only projections are sent to our brain, immediate feedback informs which receptors should act, and how to be combined.

Smell is connected to: memory, salience, affect, and avoidance, cross-modal, auditory associations, decision making, navigation and perception in time, cross-modal integration

INBODIED INTERACTION DESIGN EXAMPLE

SMELL

Tom Gayler, Lancaster University

Insights

- Understanding the neuroanatomy of smell offers new design opportunities, particularly in relation to memory.
- Memory-odor pairs are usually based on old memories; however, we propose a novel learning mechanism for encoding new memory-odor pairs.

The sense of smell has long played a minor role in HCI [1]. However, its somewhat limited use could be transformed through an embodied interaction approach that leverages the physiology of smell—specifically, the possibilities to combine the *cognitate*, *sleep*, and *eat* areas of the in5 model (see article on tuning in this section) to yield benefits, from health to performance.

INBODIED INSIGHTS INTO ODOR AND MEMORY

Unlike most other cranial nerves, the olfactory nerve is wired directly into the cortex, indicating its relative importance for survival-related functions (for example, assessing if food is safe to eat). Smell stimulates several other key areas of the forebrain, including the insular cortex, an area that supports interoception (the sense of the internal state of the body) and our sense of self, and areas related to visual vividness and emotional processing. Memories that have

been paired with odor cues during waking hours and reinforced via odor exposure during slow-wave sleep were shown to consolidate memories [2], indicating a form of passive reinforcement that can boost human performance.

Through an embodied interaction approach, we can design interactions through layering different perspectives on experience, connecting existing HCI knowledge with new behavioral and neurological insights. Consider the case of odor-cued memories. We know these have emotional dimensions through stimulation of the amygdala; these experiences affect our sense of (inbodied) self through activation of the insular cortex. Weaving these insights together can change the way we use odor in HCI, combining both passive and active interactions that can subtly influence user behavior or support deliberate user action. The experience changes whether the perceived odor is something that is stumbled across or



Hay is the Soul

Hay is the soul of a rapidly changing local culture in a slowly changing landscape.

Hay is probably THE iconic smell that lingers on in our collective memory. Astonishing, since hay has almost disappeared from our Western European rural areas. Husbandry in the mountains is almost a living museum, and because of that one of the few places where you can still find hay. Even in the mountains many of the farmers put most of their grass in big rolls, wrapped airtight: silage in stead of hay. And even if you find hay in the mountains the smell of hay has changed and will loose more of its complexity due to changing agriculture, and a growing number of ski-pistes. Tschlin is probably one of the best kept local cultures with a fully operational landscape. Hay is the soul of this local culture that is also the keeper of manure and beetles, cheese and herbs, orchids and insects, houses and burning woodstoves.

CO+ : a proposal for a collective interdisciplinary study on the local smellscape of hay.

Analysis

If smell is a mixture of volatile molecules, and a rich smell is a complex smell: then what are the components of this iconic smell of hay? Put a few hands full of alpine hay in the distillation column. The first drops fall in a tiny bottle.

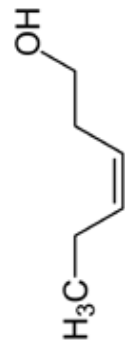


Destillation of hay:

Step 1: green apple, sugar syrup, fern, citrus. The tiny bottle with these first drops is sealed, a new one under the glass tap of the distillation column. Five minutes later it is *step 2:* urine, citrus, woody, fern. The urine touch is not pleasant. Next tiny bottle, *step 3:* less fresh, warm, fern, apple, urine, quince, unripe plums. This phase is definitely not what we had in mind thinking about hay as memorable smell. *Step 4:* plums, citrus, fresh rubber, quince. Again, Rubber and quince are rather heavy lingering smells, and not easy to 'digest'. *Step 5:* green, citrus, quince, cucumber, gall. Fresh and bitter compete, but we start to recognize some of the beauty of the smell of hay again. *Step 6:* quince, grass, apricot, smoky, burnt rubber. *Step 7:* quince, yellow, rhubarb leaf, burnt rubber, unripe green fruit, pear. *Step 8:* citrus has gone!, burnt rubber (but warmer), acid, vomit (strong activation of the salivary gland). *Step 9:* green unripe fruit, rhubarb leaf, acid, Schnapps, stony. *Step 10:* fruity, plums, acid, wakes you up, salivating, citrus notes.

Compared, selected, combined into three smell groups. Those three mixed, carefully, into the final composition to represent the smell of hay.

To smell knowingly is so hard, because of our lack of words and images to smells, even though we recognize them. It is easier when you discuss smells with others, smelling as a group. Discussing the 10 distillates of the hay we could find three key notes in hay, which, only if combined, bring out the sweet smell we agree on to be THE smell of hay. But after our -chemical- analysis of hay we may never be able to return to this unconditional love for hay. Is there a cure for this 'faux de pas' resulting from cultural curiosity? May be? Let's return to hay before it was hay, to the separate plants, their smells. Let's replace the chemical analysis by a sensorial analysis. Plant by plant, from seed to flower, from wet to dry, from location to location. And what about the life of hay after digestion by cattle, goats, sheep? Let's check that out too! It will lead us to the animals we keep, feed, milk, eat. And whatever we follow, we pay attention to smell, the emanating smells and what those smells tell other living organisms, and what smells tell our brains. We interpret the cultural landscape as a smellscape for all organisms.



Cis3hexenol

We don't know which properties of a molecule define what we smell. We do notice when a molecule is mirrored, or a difference of one or two molecules. Smell and taste are two different senses but in flavour they combine forces. Like to re-inforce the sensation of salt without adding more salt you can add the smell of anchovy.

We have not many words for smells in western culture, but flavorists are trained to recognise 500 smells, and the words attached to them are more or less logical comparisons like Green apple. It are the more abstract smells, like sulphur, that need a different type of word. We use a vocabulary borrowing from chemistry. Like freshly mown grass is Cis3hexenol.

Lisa Wijnen, Flavorist Givaudan, Naarden, interview KH

One needs to combine many disciplines like geology, biology, history, which would make it a tedious job. Local people are the best teachers. Let's ask questions, exchange stories on how we live in a landscape, why we visit, why we stay, smell, look, listen, taste, touch, why we observe. Let's combine observations and memories. A collective interdisciplinary study on the local smellscape of HAY will reinforce the emotional bonds in our memory to this landscape. Memories based on smell root deep.



Hay is the Soul, a changing smellscape (outline)

World map of hay cultures

different plants, different processes, different smells, different tastes
 seasonal (food rythm = change of smell in the village, of the food, ...)
 smell as a signal, smell as an esthetic
 inventory of representations of hay-smell

Case study Tschlin

NATURE (past-present-future)

What is hay before it is hay? NATURE

inventory of grasses and herbs
 plant communities
 other species in symbiosis with herbs and grasses
 interdependencies
 medicinal use
 _____ in/direct food for people? **+**

Description of the alpine zone, conditions/seasons (SMELLS)

CULTURE (past-present-future)

Why do we keep cattle/sheep?

milk, cheese, butter, meat, leather

Why do we make hay?

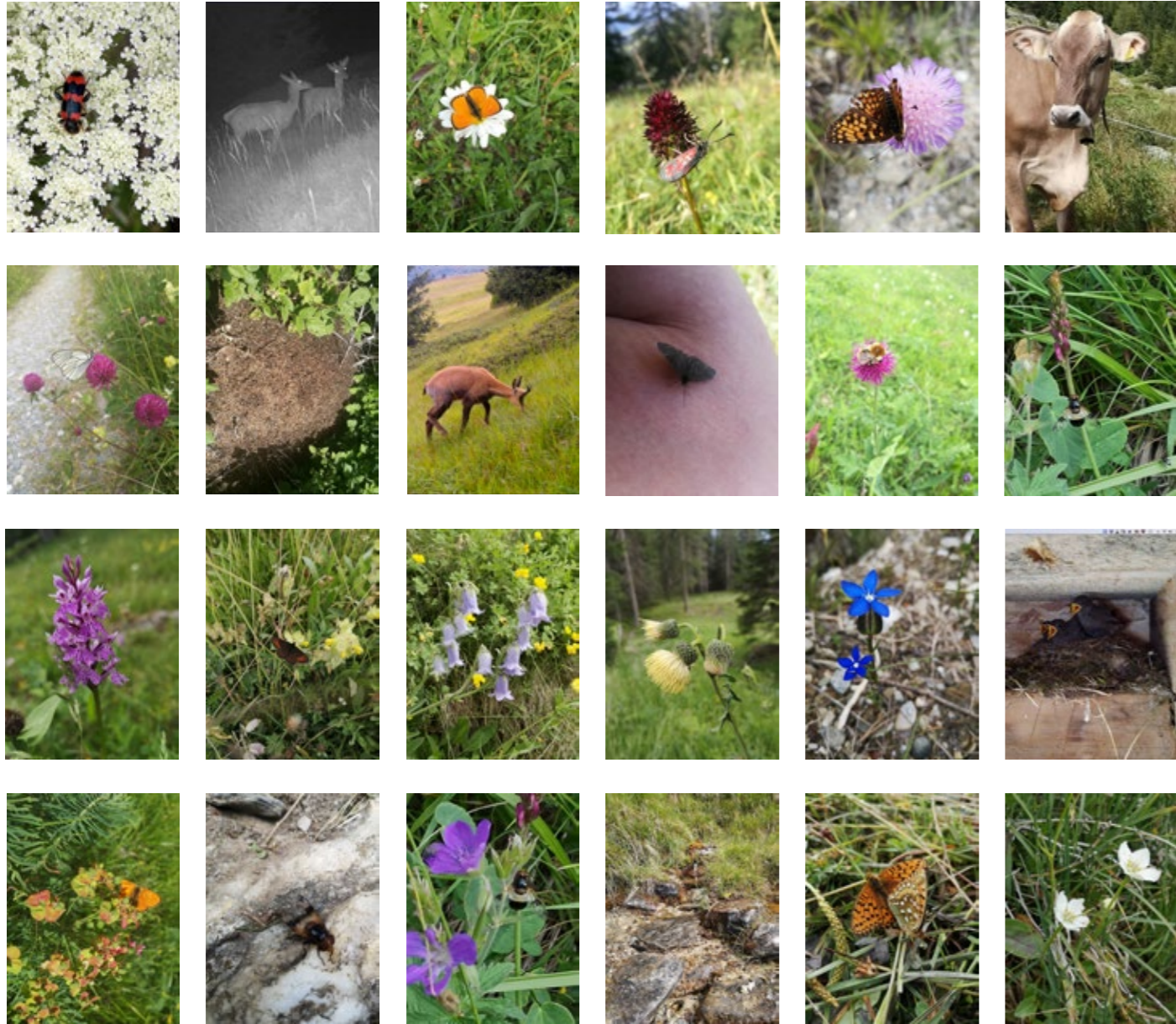
fodder, preservation

How do we make hay?

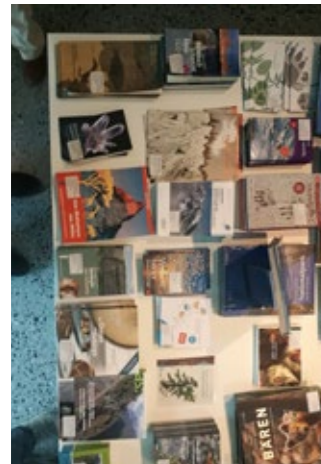
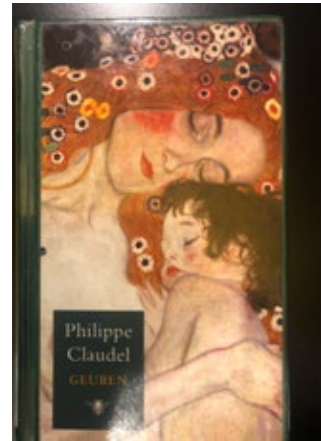
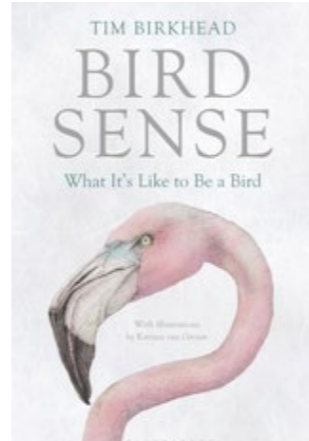
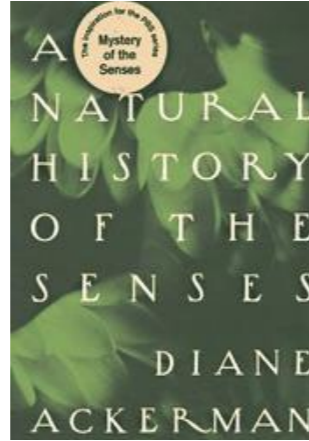
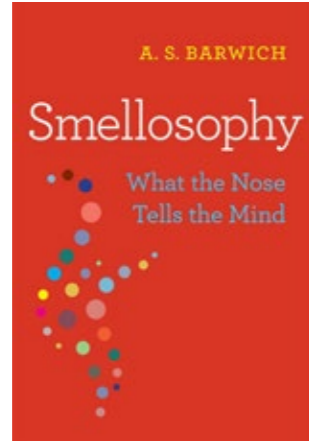
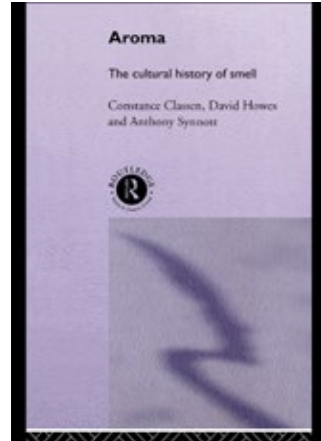
_____ harvesting techniques **+**

Changing Alpine Culture <=> Changing Alpine Nature

Natural sources



Cultural sources



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English text edits by Ton Haak

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