

QUICK CLAY

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Quick clay is generally quite firm as long as it lies undisturbed but flows like liquid if it is overloaded or stirred, causing the loose grain structure to collapse. Quick clay landslides can develop rapidly when the firm clay liquifies. This can happen due to overloading or digging, and can be triggered either by nature itself, for example, by river erosion, or by human activity.¹

January 2017, Sørumsand. I am in the car on a trip I do not really want to take. In aerial photos released by the press, I had seen an ochre-coloured farm, which I was certain I would be able to see from the road. I had been wondering if I should make this trip at all, and I feel a tension in my body. A roadblock on the right. It is there. I do not stop and drive past slowly. A few kilometres further ahead, I turn into a side road where there is a parking lot outside a nursery where the day's activities have begun. I stop the car and think for a moment. Then I drive back to the roadblock, pull the car into a bus stop, leave the blinkers on, and walk a few meters into a field. No cars, no people, just cold wind and frost on the ground. No snow. I look in the direction where the quick clay slide is supposed to have happened, but just glimpse something greyish brown. No more than that. I stand still for a few minutes before I turn around and go back to the car. I do not need to get closer and dislike the fact that I have sought out the scene. But I had to drive here to see the place in reality. I hope nobody has seen me.

11 November 2016. I am listening to a news broadcast on NRK. In the broadcast, the incident response leader of the Eastern police district is speaking:

We are talking about a slide of twelve to fifteen meters which has brought enormous masses of soil and quick clay with it and carried it some distance over the ground, across the road and about a kilometre along a river. The enormous masses appeared suddenly on Thursday afternoon after 16:00. Six workers from Lithuania were working in the woods. Three managed to get away, but three others disappeared in the soil and the clay. It is uncertain if they have been found. Norway's Geotechnical Institute have told NRK that they are dealing with an ice-covered sea of stirred quick clay.²

Eight years earlier, Kattmarka. It is summer, and I am on a residency, working at Spillum Dampsag and Høvleri, at the Norwegian Sawmill Museum in North-Trøndelag. The bright nights afford me incredibly long workdays. I am pretty much on my own. When I am not working with wood at the carpentry workshop, I spend my time cycling around the area and take photos of whatever grabs my interest.

My Dutch colleague, Alexandra Engelfriet, will be visiting in a week's time. We are planning a day trip to an area where a large quick clay landslide occurred in a residential area a few months earlier.

It is sunny, and we cycle from Spillum in the morning. We follow the country road through Namsos and further out through residential areas next to the river. The paved road peters out into a gravel road and stops shortly after at a barrier. We lean our bikes against a temporary fence that

cordons off the area. There are excavators here, but no signs of activity. Nobody in sight. We go close to the destroyed houses. An upturned car is lying on its roof. Trees have been pulled up from the ground; they lie there with their roots exposed to the elements, encrusted with soil and clay. Had I not known about the landslide, I would have thought that it was a bombed-out war zone.

I walk up close to the mountain wall at the edge of the landslide. It is covered with a thin layer of crackled light blue clay. The clay is clean, and I imagine how it ran down over the side of the mountain like a thin soup, without resistance. I photograph the area, detached, as if I was documenting the place. Then, I stand in front of the mountain wall and set the camera to self-timer; a 10-second delay. I am framed in the shots with my back to the camera in front of the wall of clay. My hand touches the clay. The touch of it makes me feel sick, nauseous and dizzy. I hurry away from the landslide; I cycle quickly on the gravel road; Alexandra follows after me. We work in silence in the days that follow. I cannot talk about anything.

After, Alexandra wrote in an email:

[...] I was there with you. We went to see the result of a huge amount of clay that had come loose from its bedding in the rock and had slid down in a large flow, taking with it many houses which were ripped apart and turned over by the forces of the flowing earth. Also, many trees lay there uprooted. We came after the event, did not see it happening, but

walked into the result. What had happened we could read and feel in what we saw. [...] We entered this place. We walked over the dried-up mudflow, we touched the wall of rock still covered in a beautiful crust of dried slip. But what hit us most was the scene of devastation. The over turned and ripped up houses. This, in itself a normal geological process, became dramatic, tragic, because of the devastation it had caused to humans. The violence of the destructive force able to wipe you out of existence in a split second was still so palpable in the result of it. I saw you being overwhelmed, nearly hit by it physically, you bent double and said you felt sick. You said it was as if a bomb had exploded here. You started to walk very fast to get out of there, you took your bike and cycled away, far ahead of me. You were in a state of shock. This experience affected you very deeply.³

The Norwegian Geological Institute (NGI) has produced a documentary film of the landslide that took place at Rissa in 1978.⁴ In the film, geologists explain what happens when a landslide is triggered, what quick clay is and how geologists in vulnerable areas work to stabilise those areas and how they work to prevent landslides from happening. What is special about this documentary film is that it is based on film clips taken by two amateur photographers who happened to be in the area when the quick clay landslide was initiated. The two photographers dramatically capture the seconds where the solid ground breaks up into large flakes, like icebergs

that crash into the sea. They run around yelling to everyone to get out of danger, a danger which they themselves were at imminent risk of being caught in. A house floats off hundreds of meters on a stream of clay before it tips over completely and disappears. It is as if the phenomenon is far removed from reality. How can such large amounts of clay and soil be transformed from solid ground to liquid mud? As if the masses' volume has been reduced to nothing.

The quick clay slide branched out into several art projects based on the clay's different stages. From dry, plastic, liquid, deposits, to traces. For several years, I focused only on this. No glazing and no firing. Only the clay itself, and that was more than enough to relate to.

The landslide means more than ideas for technical surveys of material. The strong impression left by the slide gives food for thought. One consideration concerned the clay's place in nature - the clay's place in the ceramic industry. I had been confronted with the realisation of the clay as a threat to humans. The clay as something unpredictable and brutal. A material that was unstoppable and had caused incalculable destruction, and which, at its worst, could result in the loss of human life.

Nowadays, when I see the clay in the different phases; how it turns, splits up into deep fissures or leaves crack patterns, I see the landscape. A landscape that at first glance seems stable but is, in reality, in constant motion and under constant change.

Through the encounter with quick clay, the clay has become more concrete, yet at the same time more abstract.

¹ Norwegian Geological Surveys (NGU) <https://www.ngu.no/emne/kvikkleire-og-kvikkleireskred> (Read on 6th November, 2016)

² NRK news broadcast on 11th November, 2016. In the broadcast the deputy leader for East Police District is speaking.

³ Alexandra Engelfriet, quotes from an email exchange on 28 April, 2015

⁴ Quick clay landslide in Rissa - 1978 (Norwegian commentary 21:12 minutes) dvd also available online at: <https://www.youtube.com/watch?v=26hooxzC-GkY&t=629s> (accessed 2018)

Translated by Christine O'Hagan

Supported by Oslo National Academy of the Arts

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ISBN: 978-82-7038-402-0