

# **Living in Ruins**

## **how to handle the results of past optimism**

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# Elaboration Phase



Siteplan, Scale 1 : 10'000, Milchbucktunnel in red, adjacent road network in pink

## Overview

Built 1975-1985, Milchbucktunnel is one of the most prominent survivors of the „Expresstrassen-Y“, a innner-city highway proposed since the 1950's to easy Zurich's traffic troubles. It should have connected two major swiss highways running from west to north-east and north to east. The proposed structure was c child of its time, born out of an unstoppable and almost naive believe in a consumerit future, further enhanced by the car-love of the individualist society. Yet the project was never finished, even tough it still exists in general highway planning done by the federal state. What it has left us with are the remains of this utopian vision of a car-friendly world that has since sparked discussion on what to do with the them. And while other highway structures are under threat of being demolished, the nature of the Milchbuck as a tunnel makes the question of undoing past mistakes a much more interesting task.

# Infrastructure Nation



View into the newly finished Gotthard-Basis-Tunnel, 2016

Switzerland is a country made out of infrastructure. After all, it is a country made out of 26 smaller countries that initially didn't have too much to do with each other. Modern day Switzerland was invented by a Frenchman, there are 4 languages and countless mindsets. But the one thing we can agree on is Infrastructure. The most popular museum in Switzerland is the Verkehrshaus, quite literally the traffic museum. From a planned spiderlike cablecar to the top of the Matterhorn from the Belle Epoque to the biggest ever passenger submarine, the Mésoscaphe, built for lake Geneva, to the longest train tunnel in the world, no infrastructure project seems to be too big and too extravagant for Switzerland. The tunnel cost us around 12 billion francs, the infrastructure around it another 13 billion. And there has never been a substantial debate about whether it was necessary. It seems that infrastructure is the one thing that manages to unite Switzerland, both geographically and politically.

## The highways are coming

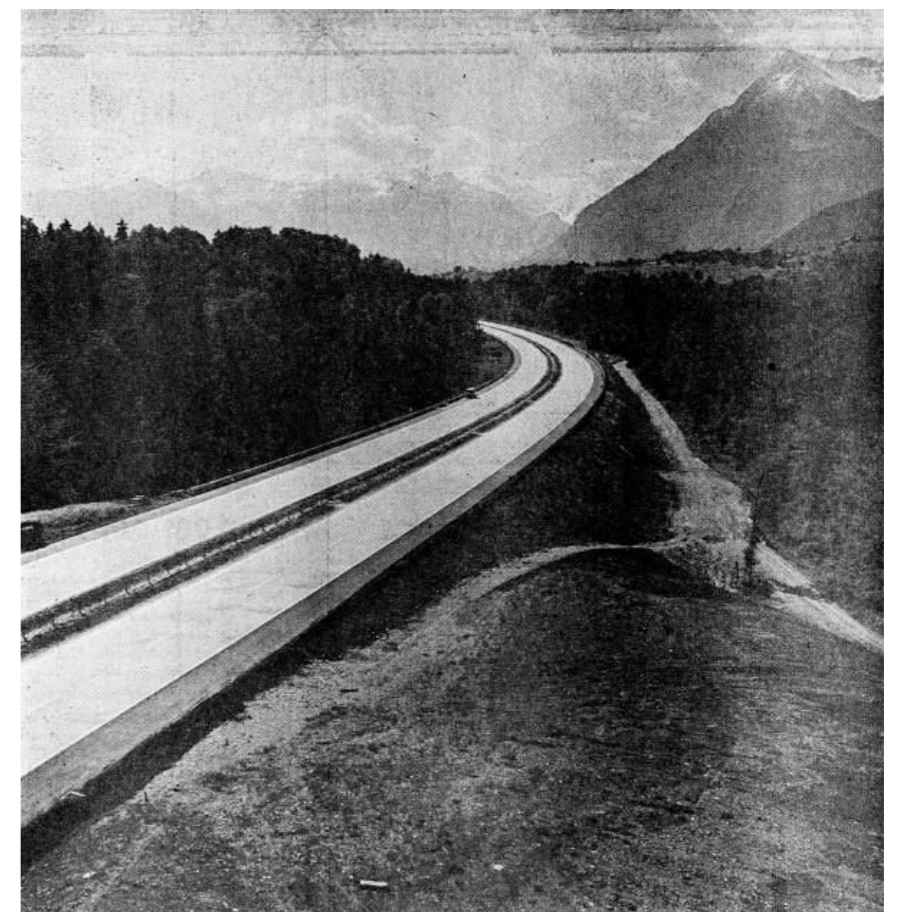


Swiss national Highway network

The highway network is no exception. The first and only piece of infrastructure built by the federal state and not by the cantons, it has transformed Switzerland as a landscape and as a society. Its emergence coincides with the postwar years of endless growth, individualist societies and suburban sprawl. The car has transformed each aspect of the daily live, it has become a cultural institution in itself. The optimism was endless and everything that stood in its way was razed. The car promised freedom and equality, speed and progress. A view on the highway was a selling point for new apartments during the early days. Started in 1955, the construction of the highwaynetwork is still ongoing, there are gaps that need to be filled. It is around 2250 kilometers long and its maintenance costs around 350 Mio. per year.



Opening of a highway in Berne, 1962



Highway construction in the Berner Oberland, 1970's

## All for the car

### *Cultural changes - new spaces*

It was the car that was powering the new society and we were ready to do all that was needed to clear its way. We built Highways and parking garages, the suburbs exploded with single-family-zoning that became accessible thanks to the car. The city was only needed for work. And whatever was in the way of growth would be razed. The car was the ideal object for the post-war society; it was an individual product that enabled everyone to go wherever they felt like. In this sense, it worked as a democratizing factor. On the highway, everyone was the same. And they all shared one perspective: Forward. The car has influenced every aspect of our lives, it has itself become an object of cultural significance. In the short film „C'était un rendez-vous“ by Claud Lelouche from 1976, the protagonist races through an early-morning Paris. The metropolis seems to shrink, space and distance evaporate in the face of the sheer power of the car. The driver arrives at his destination and kisses his lover: The car has helped him fulfill his dreams.



## Oil crisis

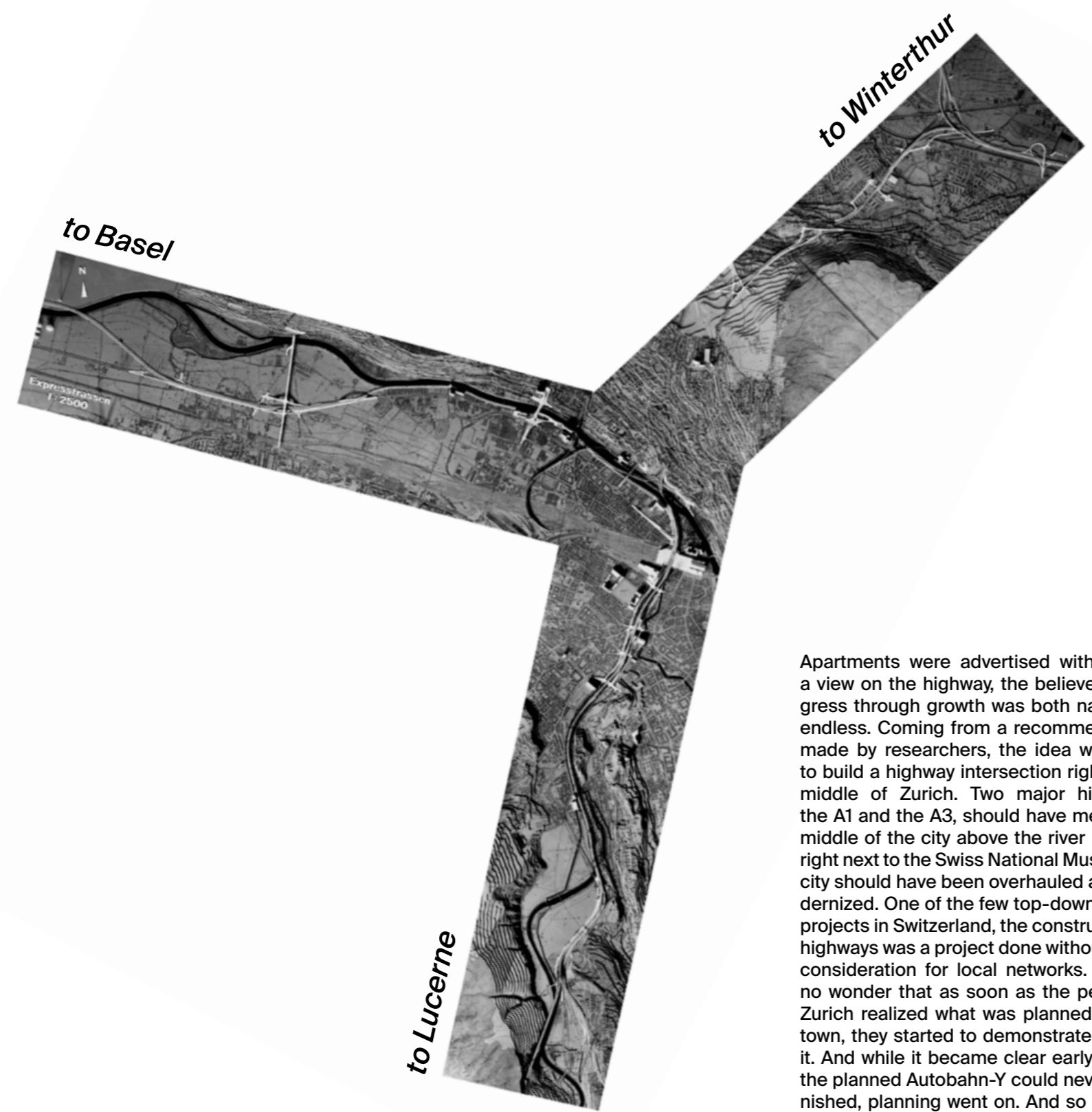
*The end of growth was already 50 years ago*



The optimism that created the highway and in therefore also Milchbuck had come to a halt. In 1973, the oil crisis and the car-free Sundays have shown the west its dependency on resources. The report by the Club of Rome on the Limits of Growth from 1972 made it clear that infinite growth on a finite planet is not possible. Even though it has not been exactly right, its easy graph made the message clear. The events have shocked the post-war system to the core and the subsequent economical stagnation have led to the demise of the welfare state and a neo-liberal economic system, but not to a reduction in consumption. Now, 50 years later, the results of our wastefulness are coming to haunt us. With enormous resources we are trying to maintain a lifestyle and a economic system of which we know is not sustainable. We will have to change, and we will have to undo our past mistakes.

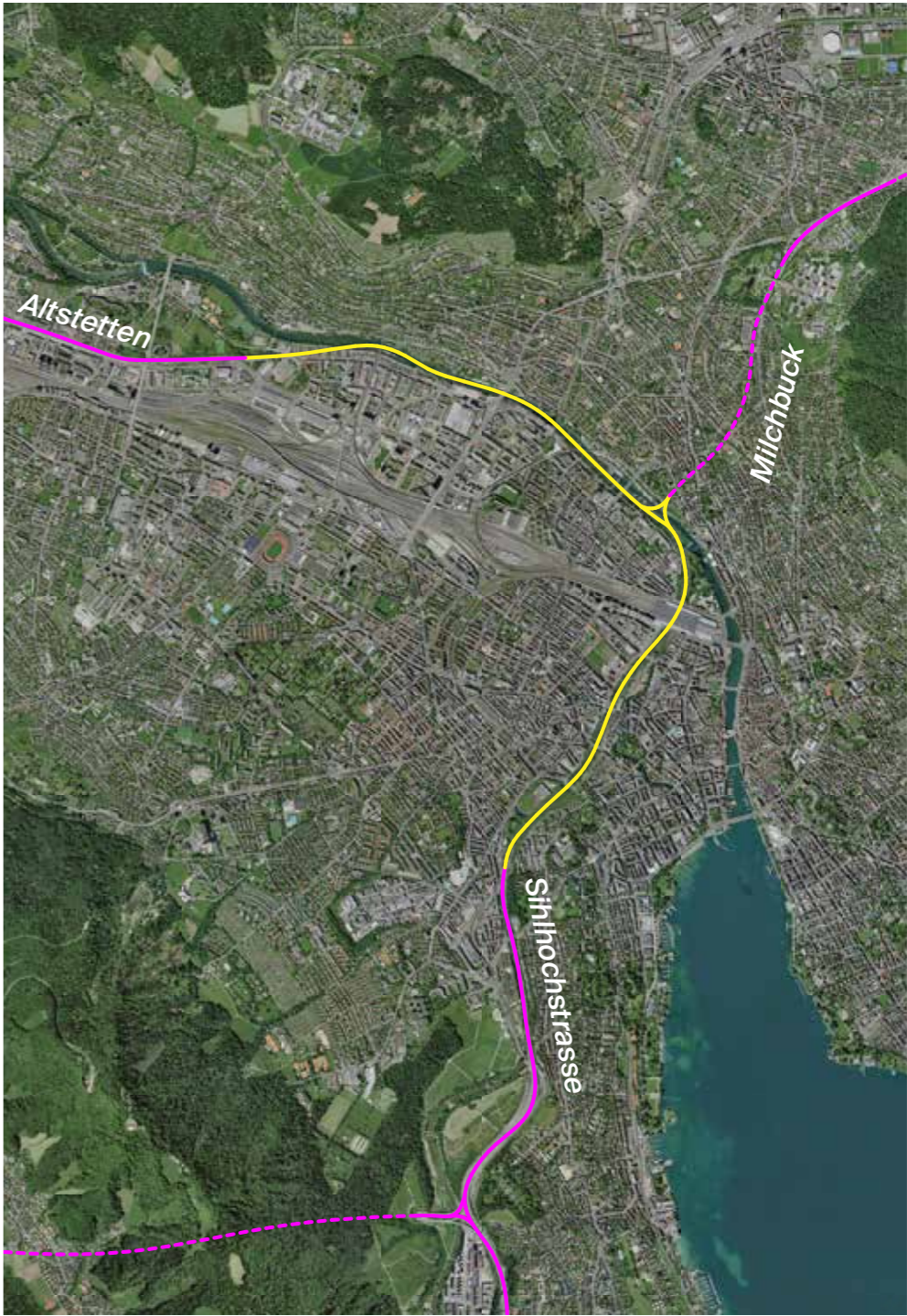
# Autobahn-Y

What was planned



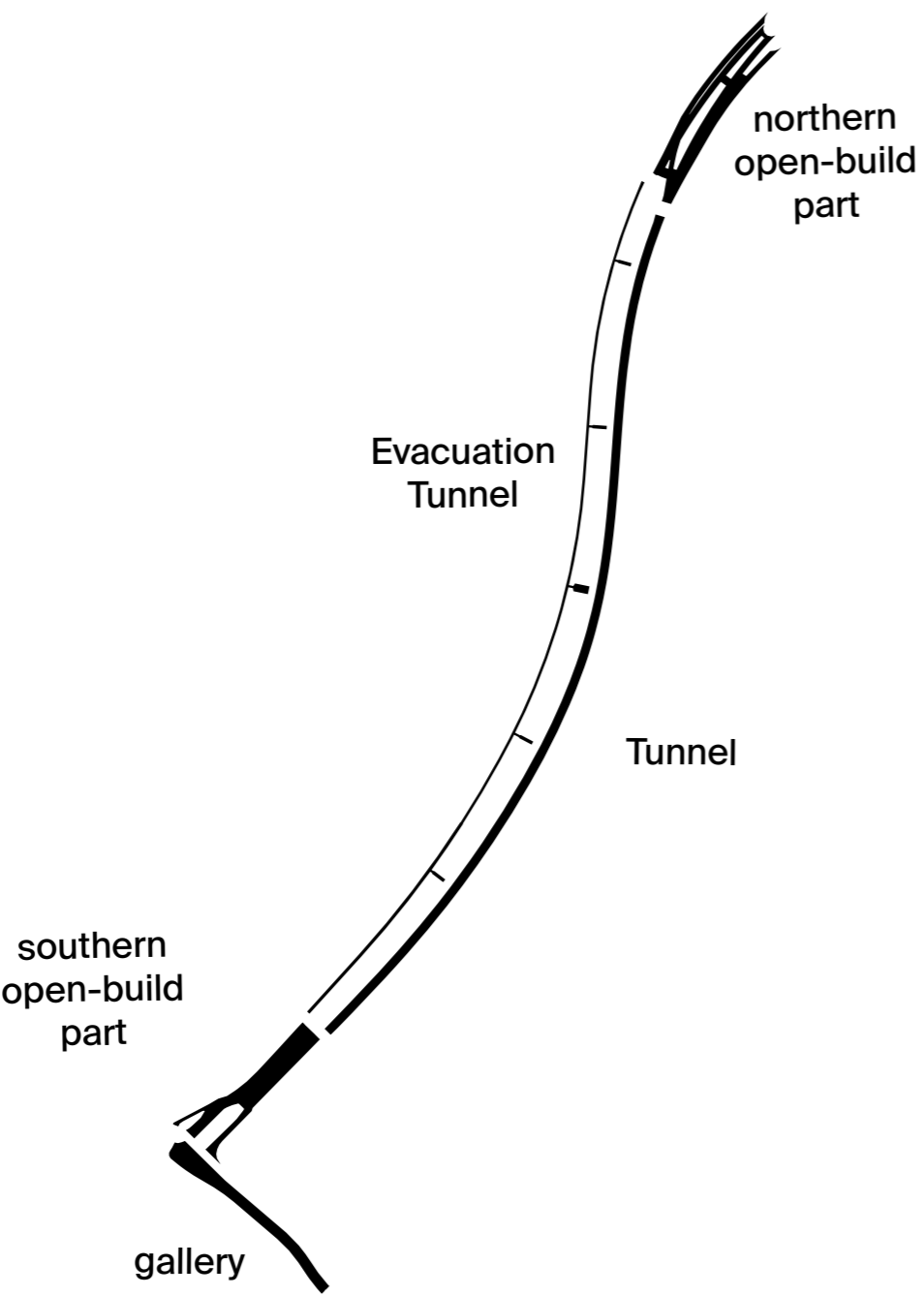
Situation model of the whole proposed Autobahn-Y, 1:2500

Apartments were advertised with having a view on the highway, the believe in progress through growth was both naïve and endless. Coming from a recommendation made by researchers, the idea was born to build a highway intersection right in the middle of Zurich. Two major highways, the A1 and the A3, should have met in the middle of the city above the river Limmat, right next to the Swiss National Museum. The city should have been overhauled and modernized. One of the few top-down federal projects in Switzerland, the construction of highways was a project done without much consideration for local networks. So it is no wonder that as soon as the people of Zurich realized what was planned in their town, they started to demonstrate against it. And while it became clear early on that the planned Autobahn-Y could never be finished, planning went on. And so it keeps on living, neither dead nor alive, but rather in a vegetative state that benefits no one. It still has not been officially canceled.



Proposed Y overlayed over Zurich.  
Yellow: Not built  
Purple: built  
Purple dotted: built, tunnel

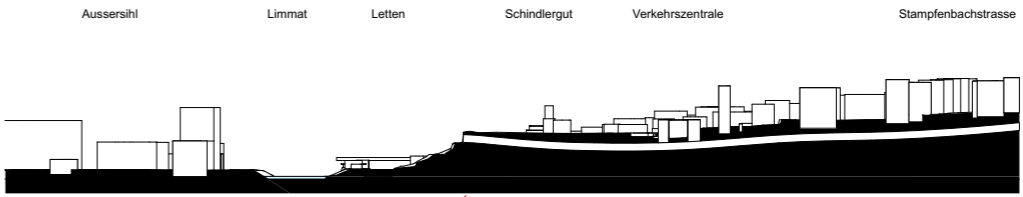
Milchbuck  
Overview



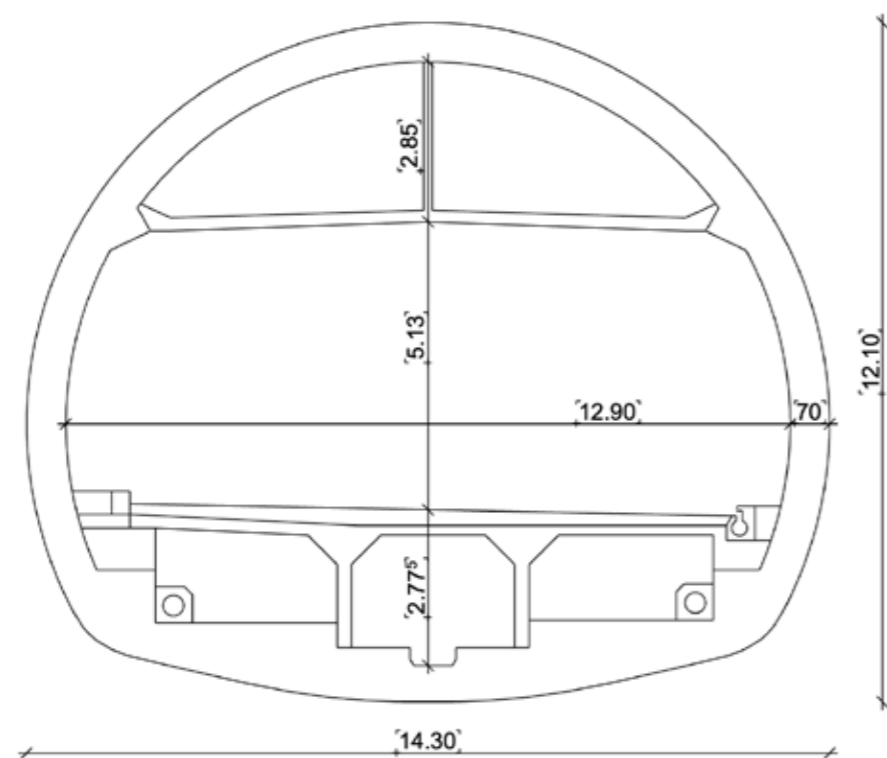
explanation on different parts of Milchbucktunnel



Plan of the Letten area, tunnel in red, park on top of tunnel in green



Section through the Letten area



## Numbers

<i><b>cars per day</b></i>	<b>50'000</b>
<i><b>CO2-emission in tunnel per day</b></i>	<b>11.7 t</b>
<i><b>total length</b></i>	<b>1'820 m</b>
<i><b>length tunnel excavation</b></i>	<b>1'311 m</b>
<i><b>length open construction</b></i>	<b>509 m</b>
<i><b>volume excavated material</b></i>	<b>600'000 m<sup>3</sup></b>
<i><b>tunnel surface (highway)</b></i>	<b>22'000 m<sup>2</sup></b>
<i><b>tunnel volume (highway)</b></i>	<b>110'000 m<sup>3</sup></b>
<i><b>cost (adjusted)</b></i>	<b>500'000'000 CHF</b>



Shape of Milchbucktunnel and the Gallery on Wasserwerkstrasse



## Area

*Letten - trainstation, decay, rebirth*



View onto Rotachhäuser with tracks, before construction of Milchbucktunnel



Letten during its time as a trainstation and during the construction of the gallery

# Milchbucktunnel

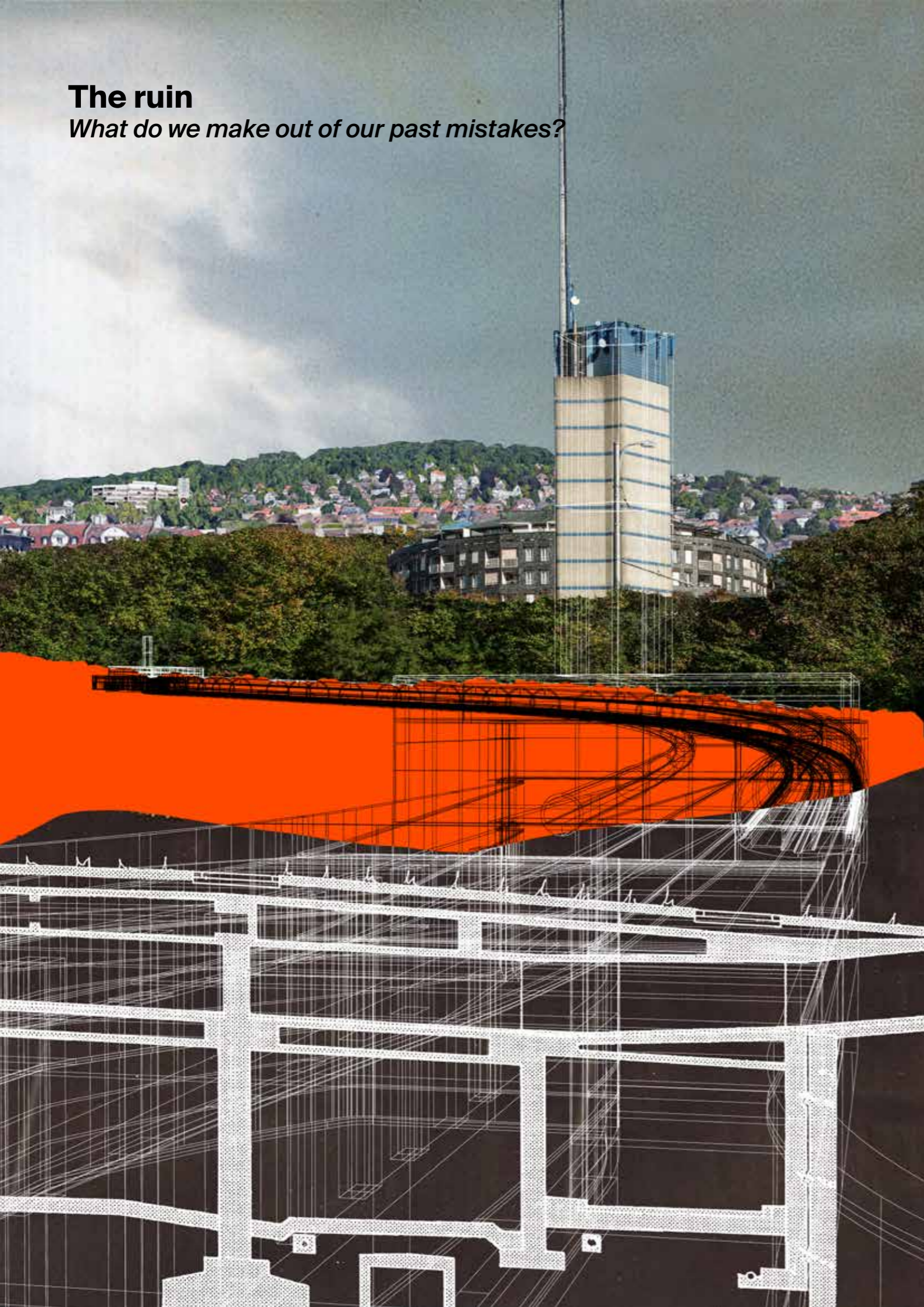
*Finished object, ongoing project*



The impressions that the tunnel creates are such of speed and linearity. Even the painted walls seem to emulate direction and power, even when there are no cars it is clear that this space is for passing through. Hidden spaces like the evacuation tunnel and the traffic management center are strange places where one usually never goes. As far as I have to make a statement on the question of list or unlist, it is already answered by the structures' sheer size. It is not under threat of being demolished, even if it should ever fall out of use. Much rather, it is under threat of being closed, sealed. It is the use as a piece of infrastructure, its permeability that should be listed and it is the car that should be unlisted, banned.

## The ruin

*What do we make out of our past mistakes?*



The opposition to the Y sounds familiar. The project was already understood as a tool of destruction, not one of increased efficiency and accessibility. The moment it was finished it has already fallen out of time. The fact that it has never been finished is generating traffic jams at its ends by pouring cars into a city that is structurally not made for them. And while 50 years ago that would have meant that we have to adapt the city to the cars, we have to find a different solution.

But what is it that we do with a structure that we want to keep, have to keep due to its sheer size, but that cannot continue to serve their initial purpose? How can we adapt a space that has never been intended to be used by humans not sitting in their cars?

And what is it that we can fit inside? The tunnel itself is roughly 12 meters wide and 5 meters high. How many uses can fit we in there? Perhaps it is also a bit absurd to think about which exact uses will be in there and how every floorplan shall look. It is maybe more fitting to think about what kind of co-existence it is that one could imagine there. What kind of people do what kind of activity? If one looks onto Zurich one sees that on one side there is a demand for public functions like swim halls and museum space, but also spaces

that are less suited for the highly gentrified environment. Nightclubs are dying in Zurich because no one is willing to give them the space that they need, the night-life has nowhere to go and on top of that it has started to annoy everyone.

To grasp the tunnel in its entirety is both difficult and useless. It is a strange space that can hardly be explained by plans and sections. Inside, there is a spacelessness, one loses all orientation on where below the city they are, there is only the direction the tunnel dictates. Its linearity and its design will always be a reminder of its initial use, the speed of the cars can be felt even when they are not there. The perspective with its lack of horizon, lack of orientation offers us an unknown and strange surrounding. To which degree will it be possible for us to exist in this space? Will it be short term, will we be allowed to exist and perhaps dwell? The security issues that come with tunnels have been solved, in 2013 a rescue tunnel was drilled next to the existing one. Aeration is provided in an excessive manner as the tunnel has to be able to deal with burning cars. But what about lighting? Should we try to emulate the sun and live in an artificial nature or should we embrace the otherworldly-ness that the tunnel provides and live in real artificiality?





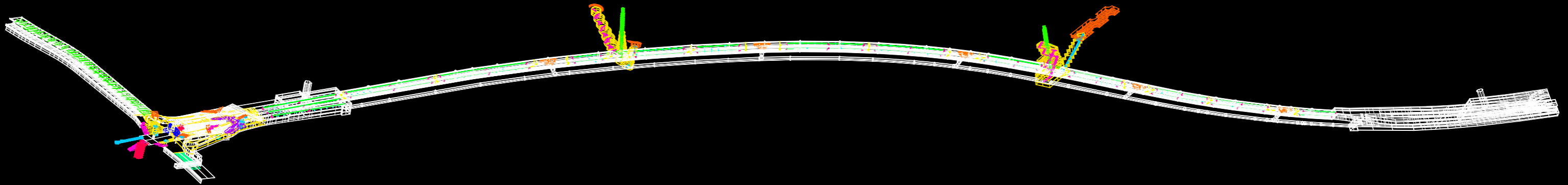
Disorienting tunnelscape, taken from Apple Maps.

# Design Phase



# ***Living in ruins***

## ***how to deal with the results of past optimism***



Switzerland – a country made of 26 smaller countries in a trench coat. What holds it all together is not our democracy, or our shared love of money, but rather our endless appetite for infrastructure. No tunnel is too long, no bridge too high, no dam too heavy to be drilled, hammered, and poured into our landscape. The people are determined to subdue the very nature that has brought them fame and wealth. The by now not-so-infra-structure has become a core aspect of Swiss culture, it is at the constant interchange of economic developments, political decisions, and popular votes. Our resources are as endless as our ambitions and combined with the need for endless economic growth the grace us with projects like the Autobahn-Y, a midcentury plan of connecting 3 major highways in the middle of Zurich. Started but never finished, it has had a lasting impact on the city, burdening it with traffic it could never handle. At Letten, where the highways would have met, the Milchbuck tunnel and its subsequent gallery still cut the city in half.

This project reflects on possible futures of structures so large they cannot be dismantled but whose current use is intrinsically inefficient and bordering obsolescence. We should never let a good crisis go to waste. These spaces were not conceived to be inhabited by humans directly, so how can we adapt them? If one frees themselves of the conventions of what a “good space” is, the possibilities seem endless. So far away from the surface, the pressure to fit into the city alleviates, uses and functions like nightclubs, workshops, repair shops, gyms, swim halls, theaters, garages, art production, bartering, trading etc. find the place that Zurich does not offer anymore. The design tries to weave the structure back into the city by cutting it open, by tearing down walls, by creating new accesses. The tunnel is filled with new (infra)structures that make it appropriable, such as water, electricity, access, partitions etc. The car is replaced by the human body in the pursuit of self-expression; the tunnel challenges the visitor to live up to its scale and to search for new freedoms.

