



STUDYTRIP TO BODØ

13 - 20 february 2023

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Background to the project

For over 70 years, the airport in Bodø has been operated both by civilian traffic and as part of the Air Force's main base. This has meant that the inhabitants have become accustomed to the sounds of aircraft and their presence in the area around them. Both using it as transport, but also seeing and hearing planes flying overhead every day. After 1.1.23, the Airforce stopped flying F-16 planes over the city, and the citizens experienced a big change.

The airport has been an important element in the development of Bodø. After Bodø was bombed in 1941 where most of the buildings in the city burned down, and Bodø airport was built in 1951, they have continuously grown together. The military base brought more jobs and residents to the city, and the defense built several two- and three-person homes in the center of Bodø for its workers. A height limit has been set on the buildings due to the airport, and no building can be above a certain height relative to the height of the airstrip. The tallest building in Bodø today is 57m. This rule led to Bodø Cathedral, Bodø City Hall and Bodø train station being built with towers placed on the ground next to the main building.

The main reason why the defense moved from Bodø to Ørlandet is because the Defense has bought new combat aircraft, the F-35. F-35 aircraft are louder than the existing F-16, which meant that if the defense were to use F-35 aircraft in Bodø, the entire city center would be in a red noise zone.

When moving the existing airport, you are left with interesting structures. This includes a runway of 45x 3400 m. The terminal building of today's airport and some bunkers from the war are to be preserved, and the area of the air force's flight shelters is to be opened up to a larger green structure, where these flight shelters provide interesting topography and opportunities to be used in other ways. The rest of the military area will be demolished and filled in for the new airport.

The purpose of the studytrip

In my final master's project I am working on the future development of Bodø. The project is based on Bodø's action to build a new airport, and where it opens up for urban development on the site where the existing airport is located.

As part of the research for the project, I spoke extensively with the urban planner in Bodø municipality, and got an overview of the city's future plans and ideas. Through meetings with the municipality, city walks, talking to locals and registration through photos, videos and audio recordings, I wanted to gain a greater understanding of what it was like to live in the city, and how one can imagine that the city can be developed for the future.

I travelled to Bodø and was planning on staying for 1 week. I had some specific meetings and things I wanted to explore. The rest I wanted to see if I could discover when I went up on my studytrip.

Itinerary

Monday, 13/2:

Flight:

Bergen, 12:15 - Bodø, 14:05

Tuesday, 14/2:

09:00-14:00:

Meeting with urban planner from the municipality.

Expert on green construction sites might join the meeting.

Meeting + city walk.

Wednesday, 15/2:

Fieldwork, walking in the city.

Thursday, 16/2:

09:00 - 10:00:

Meeting with bio diversity expert from the municipality.

Talk with my moms childhood friend at 19:00

Friday, 17/2:

Fieldwork, walking in the city.

Working.

Saturday, 18/2:

Fieldwork, walking in the city.

Working.

Sunday, 19/2:

Fieldwork, walking in the city.

Working.

Monday, 20/2:

Working

Flight:

Bodø, 16:45 - Trondheim, 18:00.

Trondheim, 18:25 - Bergen, 19:30.



The airport strip in Bodø, seen from the terminal. This will be the site of the new city development.



Bodø seen from the top of city hall, photo taken towards north-west. The tall building in the middle is Bodø's tallest building, *Bodø 360* with 17 floors and 57 meters.

Diary entries for the week

Monday, 13 february

From the airplane:

I have taken these types of planes before, but not these big airplanes. But it is still Widerø-planes where you sit two and two. I was supposed to sit by a window, 15A, but a nice older woman asked if she could switch with me so she could sit with her husband. The airline randomly chose my seat, if not I had to pay more money for the airplane ticket. I sat almost in the middle of the plane, right by the motors. It did not make as much noise as I anticipated. I got used to it after some time so I could finally hear my music from my headphones. A small family sat behind me, they had the northern dialect. They had a baby that cried a lot, but fell asleep sometimes. The airplane was very warm so maybe that's why the baby was uncomfortable.

As a child I used to take these planes to visit my grandparents every summer, they lived in Sandnessjøen, 35min south from Bodø by plane. The mix of the dialect and the complimentary coffee always makes me feel so nostalgic.

On the airplane it is a mix of people, both business people in suits, computers and headphones. People who are there to work, maybe as a part of a cultural event because they dressed normally, somewhat creative but discussed an future event. There were some people who were maybe going home, and there were tourists. Which most likely will transfer to another place from Bodø - most likely to Lofoten or further north.

After the landing:

When I land I tried to capture as much of the area around the airport as possible - which will be the site of the new city development. It was very grey and rainy, but you could see some snowy mountains from behind. I was wondering if it was snow in Bodø because I saw so much snow from the airplane, but I later learned it was leftovers from a week before.

It took around 10min to walk to my airbnb from the airport, but only around 5 min. There were placed signs written in English all around a street for tourists to find their way to walk to the city center because of the typical street had construction work. I felt like I was walking in a neighborhood street - the main street to walk from airport to city center. My airbnb house is in an area called «Svenskebyen» It is a «typehus» from Sweden, given as a gift from the Swedish red cross to the city when it was burned down during the war and people were homeless. I live in a house with a small family, two parents and a small child around 3/4 years. The mother's parents are also visiting because the parents will go on a short trip and they will look after their child. The grandparents are from an area close to where my mother is from. And the father is an architect graduated from BAS and works in the municipality. Very nice and cozy family, and they invited me to eat dinner together with them after I arrived.

I took a walk alone in the city after dinner. It started to become darker, the sun sets around 16.30 here this time of year in february. Everything is in walking distance. Some of the streets are very wide and long, they remind me a bit of Berlin or the bigger European cities. The city seems bigger because a lot of the buildings are tall and placed in a strict grid, so you don't necessarily see the areas around. You just have to walk around to get to know the place. There was a lot of program in front of the water line, so some of them was not so available and approachable. There is a lot of shopping opportunities in the streets. I took a walk alone in the city after dinner.

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Tuesday, 14 February

I had a meeting with the urban planner from the municipality, the one in charge for the new development. He is the one I have been in contact with before and has helped answering my questions and helping me with digital files etc. He presented the plan development of Bodø, how it has grown outwards and their wish for the new city part to become a more densified area. He went trough a presentation showing different strategies the municipality also have done to the city of Bodø, and how these improvements will also be improved my the new city part. It was special to see how much of the citys development is based around the airport. The airport in Bodø used to be both a civilian and a military airport, with the military using F-16 fighter jets. The sound zone is divided into several layers, with the closest being in red, reaching over some parts of the city center. Most of the city is placed in the yellow sone. The city could develop a bit around the rules, having some housing and programs in the red area. But the new airplanes the airforce bought, F-35, was much louder than the F-16. So the whole city center would then be in the red zone. Then the decision was that the airforce would move the base somewhere without so many civilians. Because the airstrip is in big need of upgrading, this offers the opportunity to build a new airport and airstrip. Making the old area a place for new city development.

I also had a talk with someone else from the municipality about green building sites, and different ays we could reuse building materials and other materials in a project. The huge airport strip is filled with concrete, but has a layer of asphalt on the top. The concrete could be pulverized and be reused, and the same with the asphalt. We were discussing different way how this could be used in the new projects, with masses creating typography that people could use or that could become temporary ponds when its raining and flooding. I got a tour of the new city hall, and almost on the top there is a balcony where you can see all about towards Bodø. Here you can se how it is really flat, with some tall buildings pointing towards the sky.

After lunch we went on a citywalk, where I was presented a bit about the historical development of the city, and shown examples of the «ettereisnisingsarkitektur» with typical modernistic facades. I was also shown some of the new planned areas. The urban planner showed me some typical way the architecture have adapted to the weather, with building roofing over many of the ground floor entrances and windows. The molo is an old structure built to prevent the weather from affecting to much the city center. In one of the main shoppings streets they have built a glass roof over, so it have been evolving a bit more like a shopping mall.

After the city walk and meeting with the municipality, I walked alone downwards to the cemetery along Torvgata. The cemetery is placed in the outline of the airport, giving very good example on how you perceive the airport while being so close. Torvgata is one of the eldest streets in Bodø, going south from the city center and to the cemetery. Along the street there was a lot of old villa houses that survived the bombing of the city during the second world war. The quality of the street itself was very strange. In Bodø there is a very contrast in the weather, so there was frozen piles of snow laying on the sidewalk. Sometimes I had to walk in the street, and sometimes I could walk on the sidewalk. Some areas there were not even sidewalks, so I just had to walk on the side of the street. But this is a very small street that only leads to housing, so there was no problem.

Torvgata stopped before you could cross the intersectioning road. The cemetery was placed on the other side of the road, being closed off by the road on one side, and the airport on the other side. I was walking around trying to understand how loud you can hear air the planes from the airport. From the day before I did not hear them so well, and the inhabitants also said that you don't hear them so well. The F-16 fighter jets stopped flying over Bodø from the 1 of January 2023, so they told me sound wise it's a huge improvement. I took some sound recordings from being there. It was snowing and rain on and off. I never saw a single person in Bodø use an umbrella, they were only using a hat or a raincoat. From the cemetery I was very lucky to experience a SAS plane takeoff, because it gives off so much noise and I could smell the fuel. Apparently in many of the reports it has never been discussed the contamination aspect of the fuel, either for nature or for people. The cemetery is still in use today. They also have some memorial spot for fallen soldiers from the first and second world war. Today I walked 15 314 steps.

Wednesday, 15 February

Today it was very sunny so I wanted to go for a walk out to Bodøsjøen. Bodøsjøen is placed on the east of the closed off airport area. Here people can have direct contact with the ocean, and continue a bit more east to another city part. Some of the closed off area next to Bodøsjøen will be open to the public when the new airport has been moved. Here would be a good place to observe the closed off area and do some sound recordings of the ocean and the sound from the airport. I wished to see more of the roads that were leading to the sight.

I walked out to Bodøsjøen, along one of the main roads and then in some other smaller roads. Bodø has been planned around a strict grid from the 1800s, and after it was burnt down during the war it was built upon this grid. In the rebuilding part this grid was kept but made the streets wider. When I was walking along one of the bigger roads, going east, I could feel the boring aspect. The street was very long and straight, and you could see the end in the horizon. I quickly realized from other people walking, they walk from A to B. I wished to walk around to get lost but it was not so easy in this area. In this area there is not so much to look at to just walk and get lost. That becomes quickly very boring. The streets appear as a bigger scale in relation to my body, they are just too wide to have a connection to. It was very boring to walk.

By Bodøsjøen is one of the few direct contacts you have to the ocean in the city center. There was a hiking path a lot of people walked. By the ocean it was quiet, then suddenly I heard the roaring of a helicopter in the distance. You could hear faintly the road on the east side but the helicopter dominated the sound landscape. I tried to record some of the airplanes, by timing on the scheduled landing/take off but I think they flew the other direction because it was difficult to capture on the

recorder. Sounded like a constant buzzing noise, but sometimes difficult to distinguish from the traffic. The area is very flat and big so the sound travels far. But on the south-east of the airport, between the strip and where I was standing, there was some height in the landscape so it protected you a bit from the sound.

I walked back the same route but to the Norwegian Aviation Museum. It was an interesting building, shaped like an airplane propeller. The building is placed over the road, Olav V road. The road divides the airport site and the rest of the city. The old airport tower was placed on top of the museum where you had a 360 view over the city. From the top of the museum you had very good view of the site, and you could see how the road acted like a wall from the city and to the airport area. When I walked back I walked another route, one more closer to the city center with. More program. I walked up to the hospital and a small park. The road going west from the hospital had the same qualities as the other roads, following this strong grid system with being very straight and long. It was better to walk here, but there was still this feeling of just walking by and not stopping so much because there was not anything particular to stop and look at. Most was housing or roads crossing. Today I walked 17 736 steps.

Thursday, 16 February

Today I had another meeting with the municipality, this time with a bio diversity expert. She showed me different types of map data bases I can use to get an idea of the airport area, and how it has evolved from being unbuilt- to built. There are three rivers under pipes under the airport that can be possible to open up. The area is ruined over time on that it will be very difficult to get the full bio-diversity back as it was. The plans of the new airport will also have consequences for the seafront, but it seems that was just something we had to relate to.

I was very tired from walking so much the other days that I just wanted to walk around the city center. There was a football game this day, europacup. So there were a lot of polish tourist in Bodø to watch the game between Bodø/Glimt and Lech Poznan. Many houses had put up their team flags on the facade, and shops and the airport and the library did the same. It was very nice weather today as well, but very windy. I walked to look at the trainstation, which is between the harbor and the city center. Bodø train stop is the end stop of Nordlandsbanen (Trondheim - Bodø). But this week all of the long distance trains were switched with busses. This was because the train was missing a locomotive.

In the evening I had an appointment with a old schoolfriend of my mother. She works for Widerø, the airline that operates the airport. She lived in the same area as my airbnb room, in «svenskebyen» This is an area where the houses are listed because they are over 80 years old and have a history from the war. The houses was a gift from the Swedish red cross after Bodø was bombed, and was supposed to house many of the inhabitants that became homeless. She gave me a tour of the house and how they renovated it. Wooden structure and clay between the roof/floor. When they removed the roof the floor was filled with sand that was used in the buildings. The Swedish houses was built on site, but the materials was shipped from Sweden.

We talked about how it was to live in Bodø, and how it has changed a lot during the years. Because of the weather is ever changing, the people here are very spontaneous. Very glad with using the nature, and uses it alot. 5 min in a car from the city center and you could be in Bodømarka. There is a own hiking-app where you can collect point and win prizes. The green areas that are mostly used are the ones in wild nature, the city lack a bit more of green areas in the center. Many people in Bodø are using

the cultural senters, it was recently built a new concert hall and a library. There is many music festivals. From her own experience and from her children experience she talks about a lack of spaces/programs for older kids and teenagers.

Friday, 17 February

Today I was just been walking around a bit, to see if there was some places I had not noticed. I walked out to the molo again and attempted at recording some of the noise from the airplane. I visited the Cathedral, which has quickly become one of my favorite buildings. It was build in 1956, with the clock tower built on the ground next to it. For the rest of the day I just walked a bit around and stared mapping and processing all the information the last couple of days.

Saturday, 18 February

Today I went for a walk again. It was snowing and windy today. I went down to Breivika, which is categorized as the city beach. I attempted again to record some of the noise from the airport. There was some ducks here. Usually there is more birds here, but because of the time of the season it was not so much examples. For the rest of the day I continued mapping and processing all the information the last couple of days.

Sunday, 19 February

Today I walked around the city again, trying to record a bit how the area is used on Sundays. But I still continued mapping and processing all the information the last couple of days. I realized that a week was maybe just a little bit more than enough, because I felt like there was not so much more I could discover or learn about. I could explore the other city parts but I chose not to do that as it would be to far from a pedestrian point of view.

Monday, 20 February

It was very sunny on my last day, but very cold. I walked a bit around and bought my last coffee from my favorite coffeplace in Bodø. I walked down to the big harbour, because I was recommended to walk out and see how it was working. I went back to my room and worked on my map of my experience of the study trip. Before I left for the airport I talked with my airbnb host how the architecture environment is in Bodø, and how the development has been and in which direction it should go.

On the plane home:

My airbnb host reccomended me to sit on the right side, the you would see the mountains in Lofoten from the plane. It was free seating in the airplane so i could not sit where I wanted, and because of my ticket i was one of the last that boarded. We had to middle land in Trondheim. On the trip from Bodø to Trondheim there was a pink sunset on the right side, and everyone was putting their head infront of the window so I could not see anything. I sat on the seat furthest out from the window on the left side aswell. I stressed a litte bit about the other plane from Trondheim-Bergen because i only had 5 min from my landing to they started boarding the other plane. But luckily the plane to Bergen was delayed 20 min so there was no problem. The other plane was bigger, and I sat with the window this time. It was dark and we could not see so much.



Bodø Cathedral, built in 1956. Has become one of my favourite buildings. It is special with the clock tower built next to it. With inscription on the clock tower to remember the second world war, *"no one mentioned, no one forgotten"*

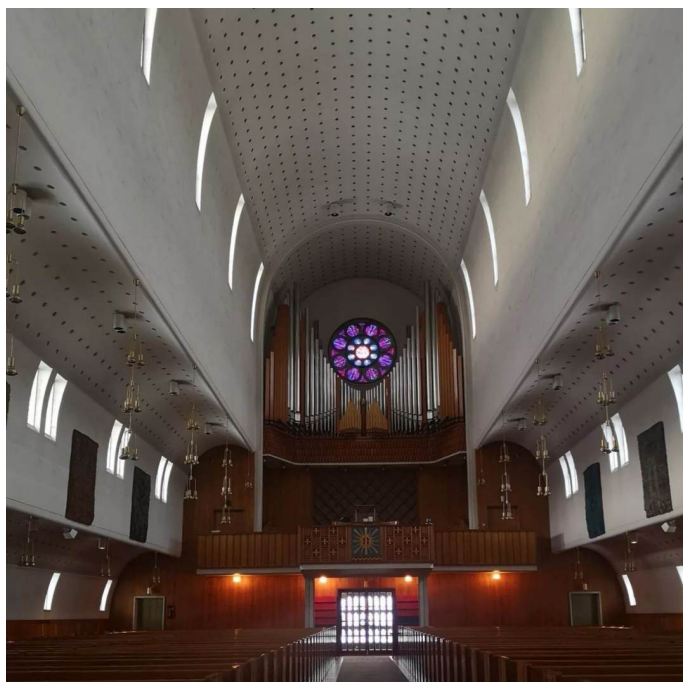




Photo of a typical house in "Svenskebyen". Tomannsbolig. Most of the housing in Bodø were either tomannsbolig or singular housing.



Typical relation between housing and road. Most of the walkable streets are car roads going trough housing areas. The state of the roads vary.



Landscape around Bodøsjøen. On the east there was a popular hiking trail that they work on making longer.



Landscape around Bodøsjøen. View towards west and towards the airport. The hill in the distance to the right is in front of the airport strip. This area will be a part of the new green area.



Having a view of the area and the airportstrip - everything that will become a part of the new city development.

Interesting structures as a result of the weather

Glasshuset

Bodø is very exposed to the outdoor climate.

"Glasshuset" is a covered part of Storgata. The street has been a pedestrian street since 1976. The street was given a glass superstructure that protects shoppers from the weather.

The glass house is not a traditional shopping center, but a protective atmosphere around the pedestrian street in a city with a lot of severe weather. The glasshouse covers 75 shops and eateries. The building has sliding doors, but it never closes. Only once or twice a year.



Molo

Moloen/breakwater is a structure that was built to prevent the harbour from being too affected by the weather.

Construction started in 1892, and was completed in 1904. Was not harmed during the bombing of the city. Up to a hundred men worked on the Molo at one time, and this was the first workplace in Norway where workers received accident insurance. On the inside of the Moloen, towards the harbor basin, is Småbåthavna, as well as a small quay for fishing boats.

Moloen is used as a hiking spot, with people going back and forth to watch the landscape and the boats sailing into the harbour. Every Sunday many locals drive out the city center and walk on the Molo. Also when there is a storm someone always walk on the Molo to feel the weather.



Small roofing along facades

Bodø is very exposed to the weather, especially from the rain. In the city center that have put on small roofing over the entrances of some of the buildings to help to protect you against the rain.



