

Opening up historical maps and photos.

Reliving the past or reversing the history?

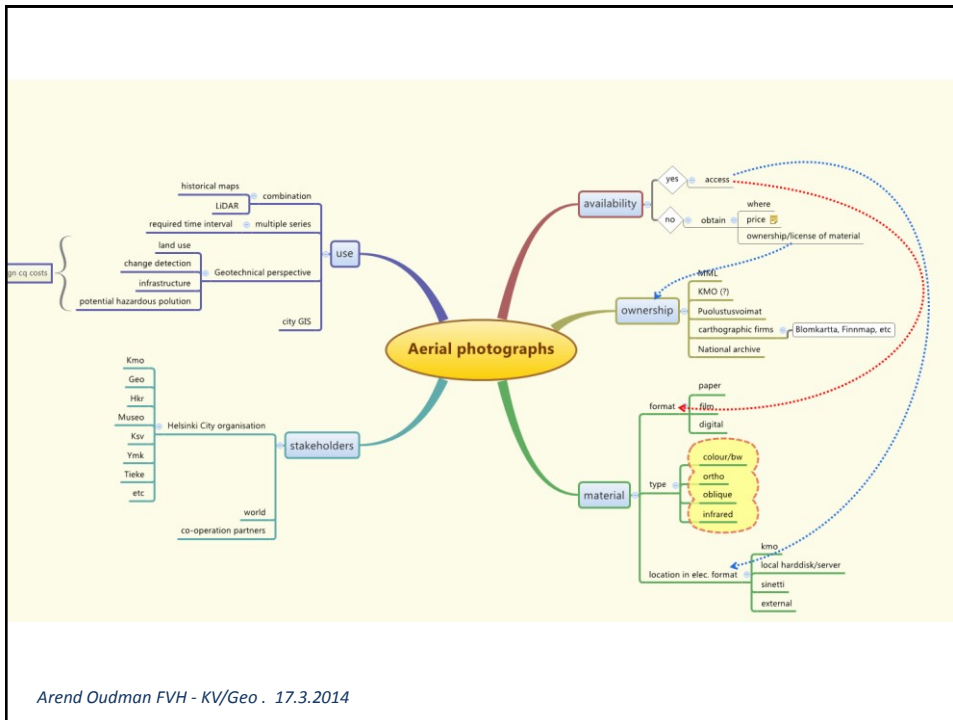
SKS Kevätseminaari, March 17, 2014

Arend Oudman & Outi Hermans

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- Why opening up historical maps and images
 - Open up our mind of what changes happened in our surroundings. Our memory is short lived.
 - For use in City planning, geotechnical inventory, ownership, forestry etc.
 - Inhabitants are pleased to rediscover their current and/or past environment.
 - Availability for use by others to make products / analysis that we have not thought about.

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Open data

- Area of interest Helsinki/Greater Helsinki
- Will all the material available as open data?
- Open Data is making it free available without restrictions from copyright, in accessible format, unconditionally for commercial or non-commercial use.
- Additional value by georeferencing.
- Benefit of re-use of material to provide new services.

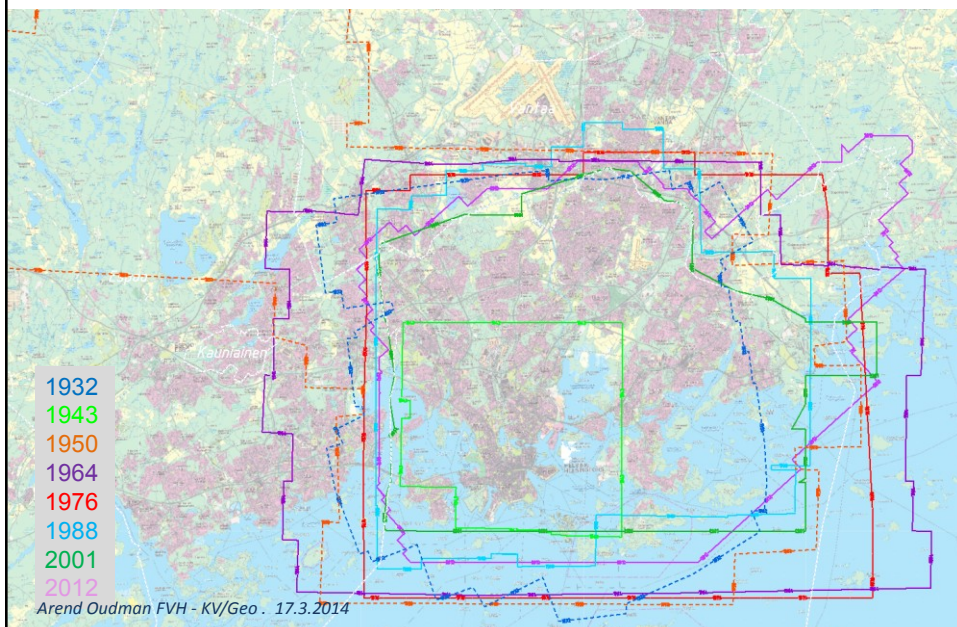
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Historical images

- Plan to obtain for every 10 year at least coverage of (greater) Helsinki.
- During important moments more frequent eg. pre- and post Olympic games (1952)
- Demonstrate the possible use of the material.
- Orthophoto's vs stereo photo's
- Oblique photo's recent + historical
- Streetviews georeferenced

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Coverage Helsinki region orthophoto's 1932 - 2012

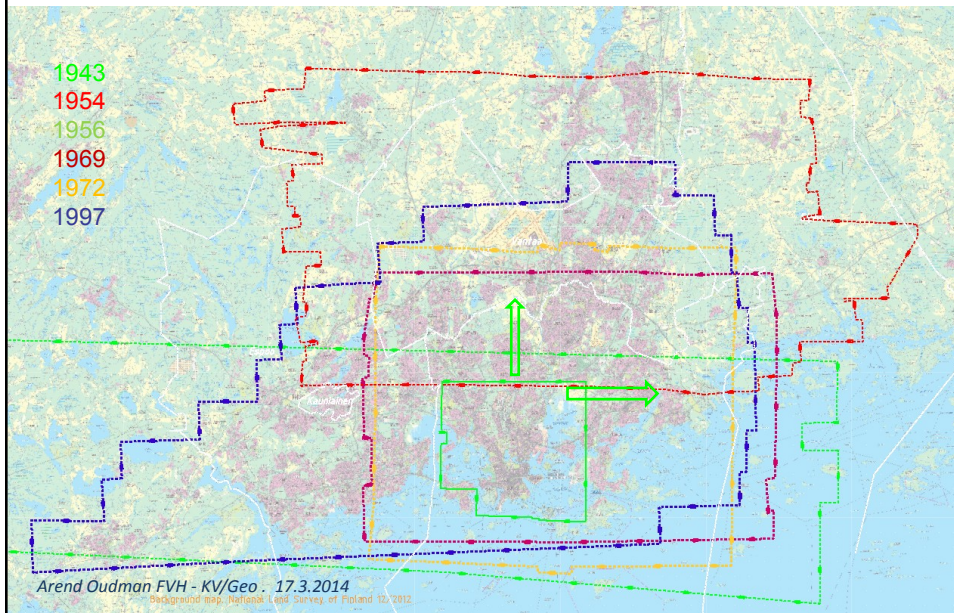


Orthophoto wish list

year	area coverage	scale	source	number of images
1927?	Helsinki? Part of?			Most likely individual images. No orthophoto possible
1943	Extension to North and East of existing image			
1944	eastern Helsinki		Topografikunta	?
1954	Northern area of Helsinki	1 : 10 000	MML	about 400 images
1956	southern part of Helsinki as additional coverage of 1954 area	1 : 20 000	MML	~130 images
1969	Helsinki	1 : 10 000	Blom Kartta	~ 297 images
1972	Helsinki	1 : 10 000	Blom Kartta	~550 images
1997	Total area: ~ 849 km ² . Helsinki: ~ 321 km ² , Espoo ~209 km ² , Kauniainen 6 km ² , Vantaa ~180 km ² , Sipoo 30 km ² , Kirkkonummi ~95 km ²		Blom Kartta	~ 103 images (Helsinki)

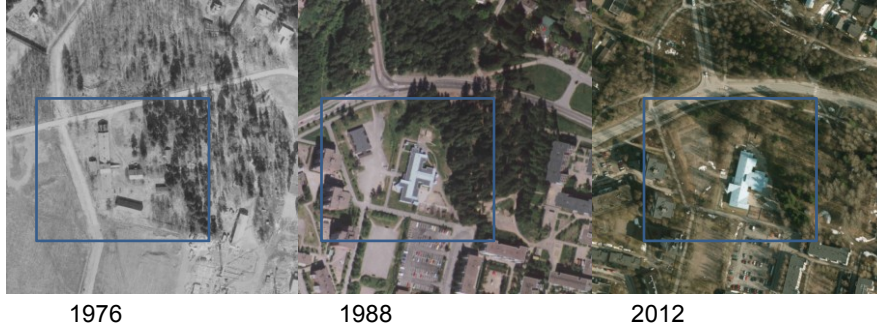
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Planned in the coming 2 years to realize



Case: Tapulikaupunki, Helsinki

Block enclosed between main road from east to west Tapulikaupungintie and Palovartiajanpolku about parallel in the south.

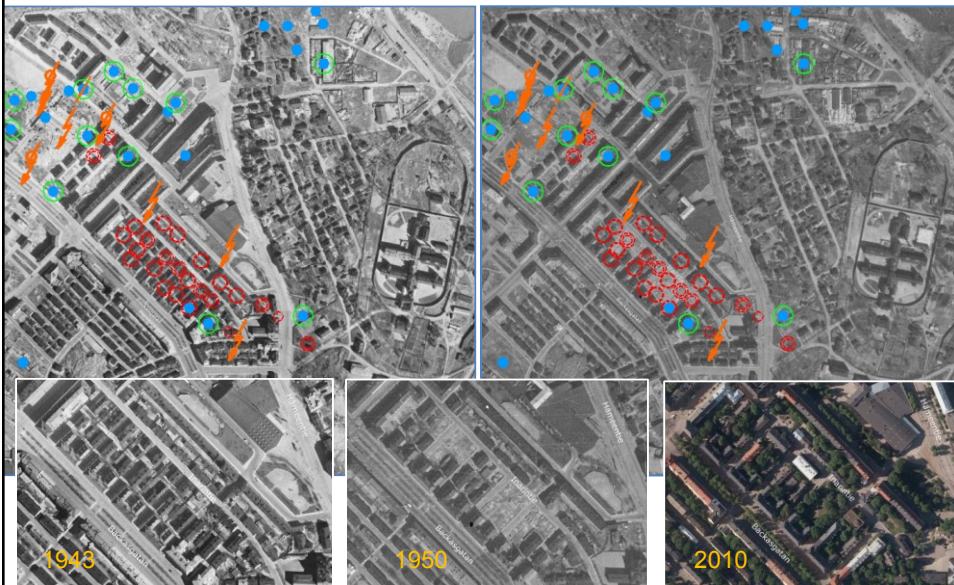


Undocumented concrete foundation found on site. With historical aerial photographs this could be explained. Extension of possible occurrence can be measured (orthophoto).

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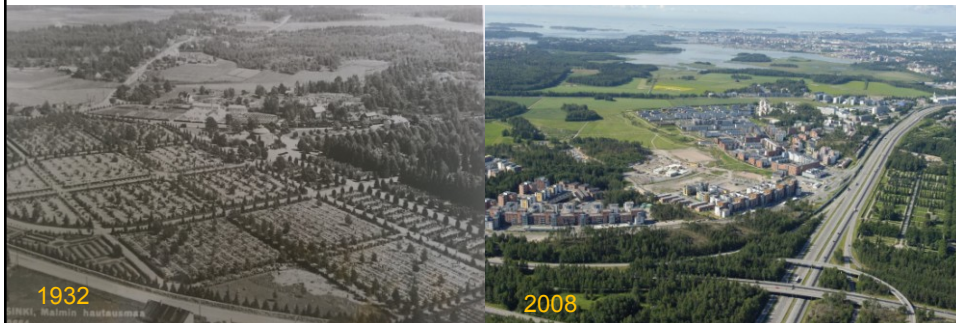
Bombardment 1944 Helsinki

What was the effect of the bombardment 6 years later: in Vallila
Use of layers with bomb type information



Oblique photo's

There exist a huge amount of oblique aerial photo's in musea, city collections etc.
Challenge to get this material georeferenced (GPS / orientation)







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Historical maps

- Observations of the past visualized.
- Gives geographical information before photography was (common) available
- Gives additional information (interpretation) to the photo's.
- Unrealized plans.

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Historical maps wish list

Year	map name	source/owner	publishing permissions	Comment
~1790	C.N. af Klercker, 	Swedish War museum	Current permission is to use it only within the City organization.	Current version available at kmo. Interesting for additional water depth along the shores
~1850	Kalmberg map 	National Library of Finland	Open data	Some maps in pdf format. Can be converted in tiff. Need permission to process and use in other format, or obtain original material. Different versions exist.
~1880	Senaatin kartasto 	National Archive of Finland	Open data.	Need georeferencing
1900 - 1980	Topographic maps 	MML/NARC		Several maps now available of Helsinki area. Need georeferencing

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Merikartta 1790

- Currently limited rights to use.
- In communication to get more rights and additional coverage of Greater Helsinki.
- If available as "Open Data" is questionable. Some reservation from Swedish Archive for commercial use.
- Obtaining high resolution scan



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Case: Kalasatama

What is now Kalasatama has undergone during the last 220 years a huge change. The rail track made the location attractive for extensive development into harbour area. And due to that, intense modification of the environment: strengthening subsoil, foundations, land fill etc.



~ 1790



1872

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Thank you for your attention