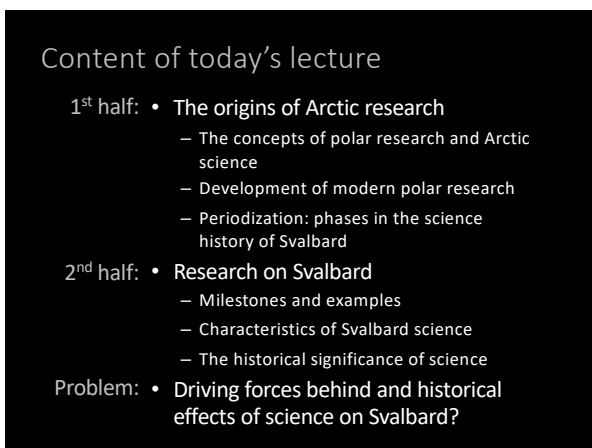




1



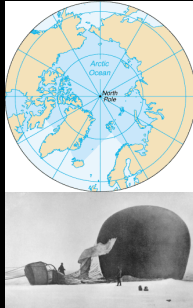
2



3

What is polar research?

- Exploration and research – contradiction in terms?
- A geographical, not a disciplinary definition
- Polar research was/is motivated by more than “pure” desire for true knowledge
 - Economic interests
 - Political and strategic interests
 - Individual fame and national prestige
- Polar research was/is typically field based, multidisciplinary, international – and very expensive

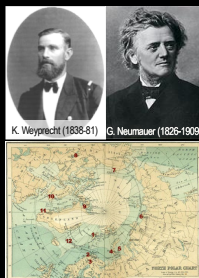


When did polar research become “scientific”?

4

Karl Weyprecht’s polar program

- K. Weyprecht – Arctic hero and more
- Polar research must concentrate on solving nature’s riddles instead of competing for international “honour”
- Pure geographical exploration must step back in favour of “scientific objectives”
- Single scientific studies must be replaced by parallel observations through a whole year. Requires international cooperation



Result: The International Polar Year 1882–83

5

Phases in Svalbard research

- Barentsz’ discovery
- Mapping by whalers
- Accumulation of geographical knowledge
- Age of reason and natural science
- The race for the North Pole
- Svalbard as field of research
- “The golden age”



6

1600 1700 1800 1900 2000


Phases in Svalbard research

- Norway joins in
- Science and land claim
- Crisis and war
- "Big science" on Svalbard
- The environmental challenge
- An international research platform




7

15 minutes break




8

Some milestones of science history

1700 1750 1800 1850 1900 1950 2000

Year	Event
1671	Martens
1764-66	Chichagov
1773	Phipps
1823	Sabine
1827	Keilhau
1838-39	"Recherche"
1861	Torell
1864, '68, '72-73	Nordenskiöld
1882-83	Polar Year
1898-1902	Arc of Meridian
1928	NSIU
1957-58	IGY
1967-74	ESRO
1996	EISCAT
2007-08	IPY



9

A changing scientific profile

- 18th and 19th century “natural history”
- Geography – a key science
- What decided the research profile?
- Resource orientation: geology, oceanography and marine research
- Politicised research?
- Environmental research and “big science”
- 21st century: Climate change



Adolf Hoel (1879-1964)

10

Summing up: Historical significance

- Increased knowledge about Svalbard – also for the general public
- Basic scientific value, f. ex. understanding of glaciations, aurora, climate, adaptation
- Scientific activity stimulated the development of tourism – and vice versa
- Geological research was a precondition for and a direct cause to industrialization
- Research and education has become important factors in Svalbard's economy
- Science has played a political rôle – and still does



T. Gjelsvik (1917-2006)

11

End of 5th lecture

(Don't forget the exercise...)



14
