

## Human Perceptions of Climate (Change)

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#### Main points of the presentation

- Climate statistics versus Climate perceptions
- □ Practical use of knowledge for insurance business



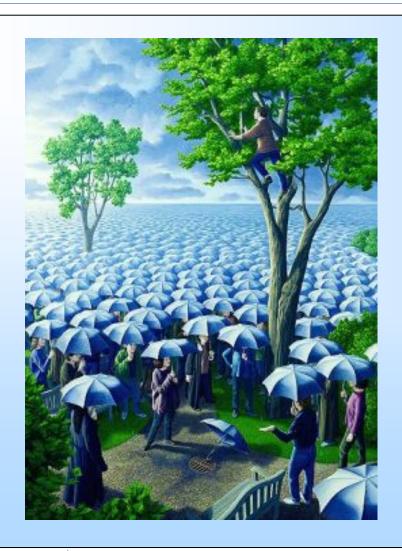
Beautiful weather (John Sloan 1907)

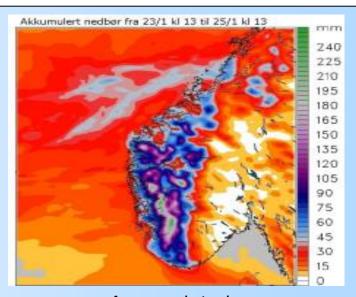






#### From perceptions to behaviour





Accumulated precipitation during 24 hours



### Weather - Climate - Climate change

#### Weather ....

the condition of the atmosphere at a given time, with respect to heat or cold, wetness or dryness, calm or storm, clearness or cloudiness

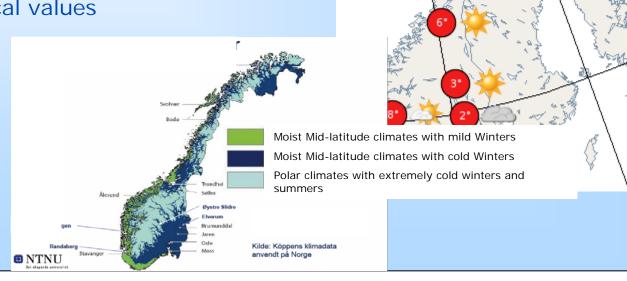
#### Climate ....

refers to the average atmospheric conditions over longer periods of time.

Represented by statistical values

#### Climate change ...

changes in average conditions, manifested in changes in day-to-day weather







- □ represent a reference-framework for understanding the world we live in
- contain <u>assumptions of what we should search for</u>
- ☐ If the main perceptions do not correspond with reality, our understanding of reality will be imperfect

(Alfred North Whitehead 1861-1947)

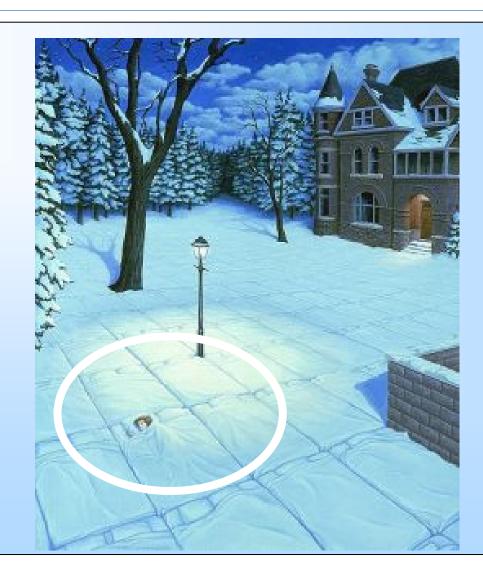




# Climate perception and physical senses

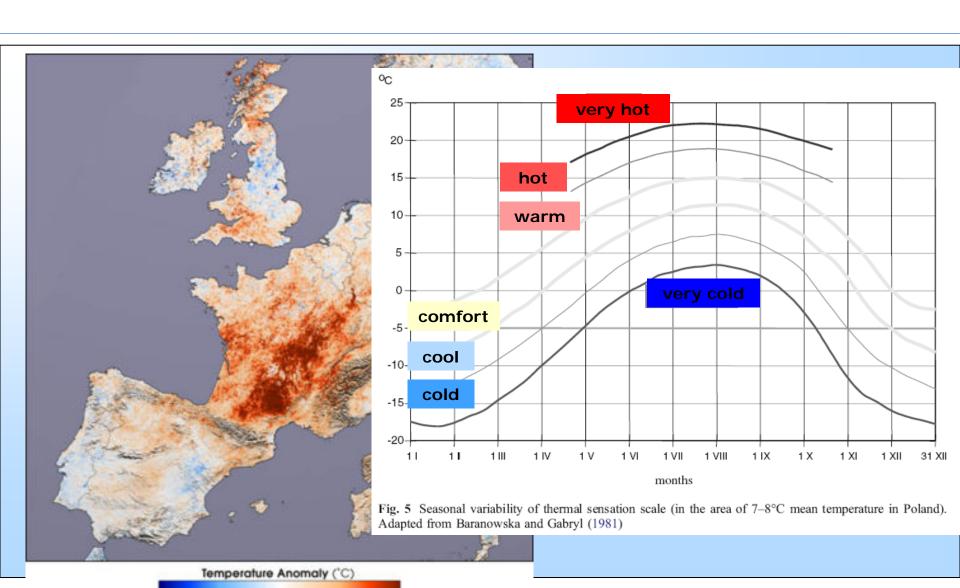


### **Sensory-based illusions**



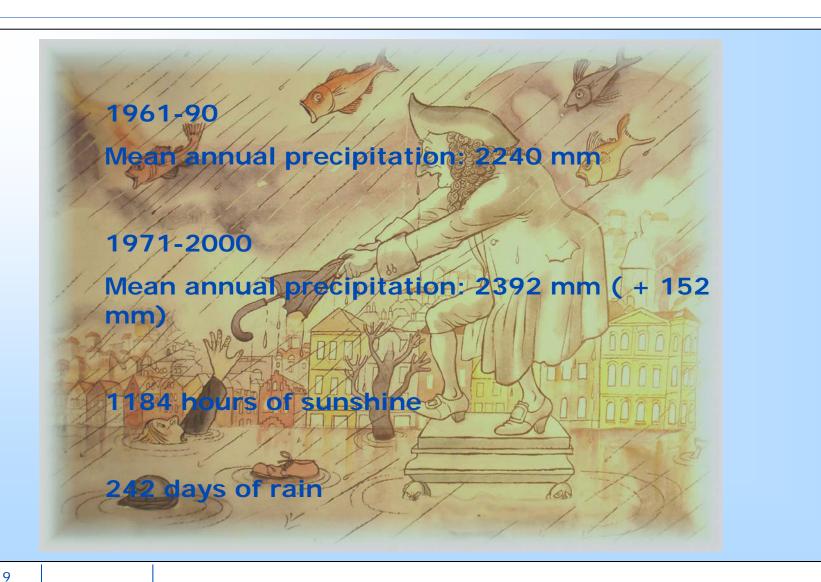


### GJENSIDIGE Heat perceptions – human comfort



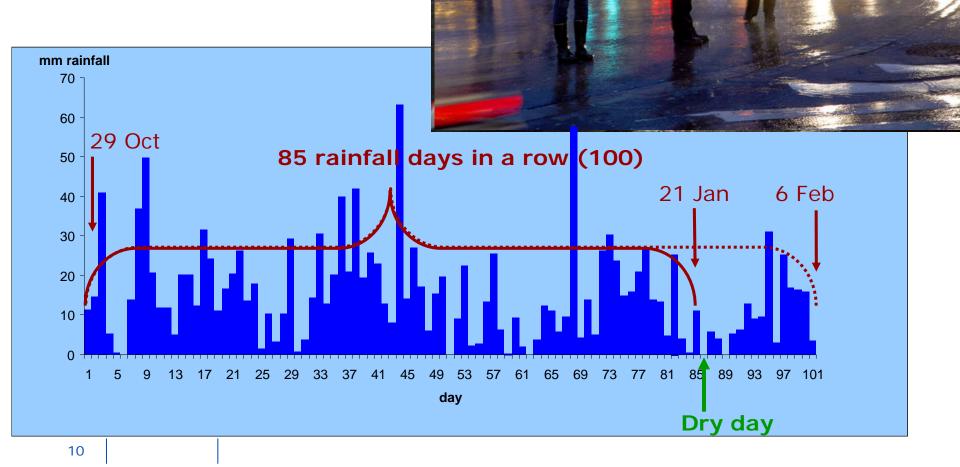


#### **BERGEN** Rainiest city of Europe



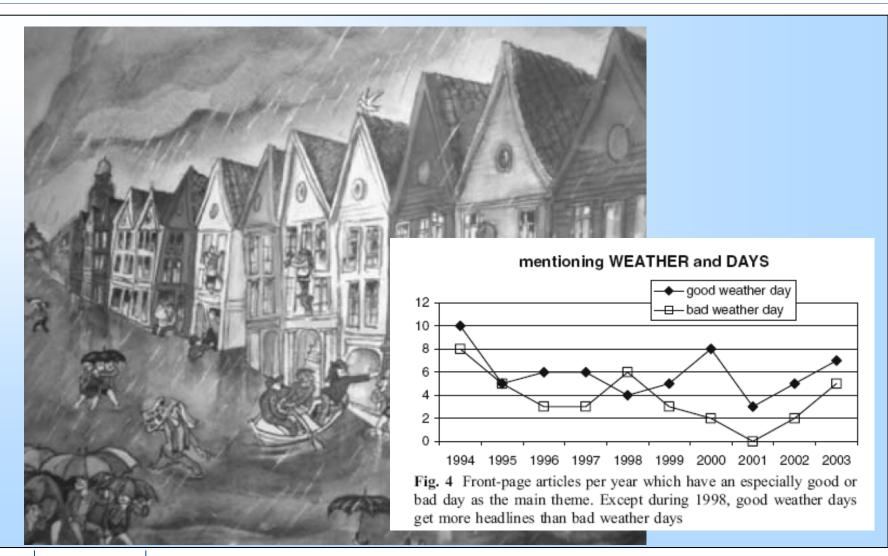


Rainfall during period 29 Oct 2006 – 6 Feb 2007





### Climate and weather stories in the News





### Climate and weather stories in the News

Good video-summer. The poor summer this year has given record sales for videos and year has given record sales the psychologist. Sweeties. Get out, advises the psychologist you cannot live in Bergen if you do not tolerate a bit of rain.

Insurance premium for natural disasters is going when living in regions with more extreme

Weather depressed Bergen people get support from researchers: a rainy and dark February on the West Coast can be worse than the permanent dark winter in Northern Norway.

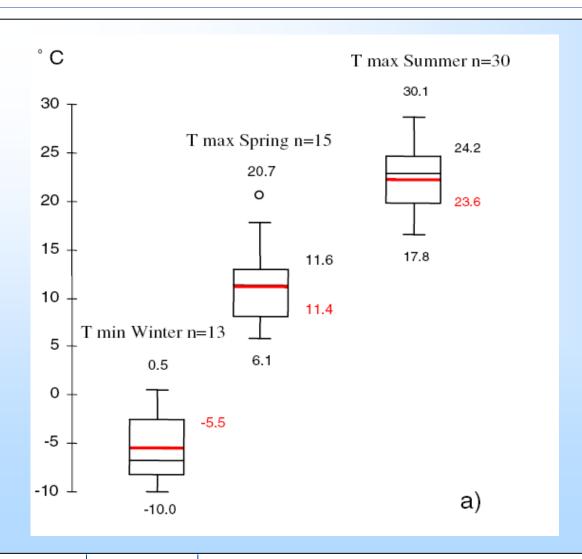
Ni av ti skoler sliter

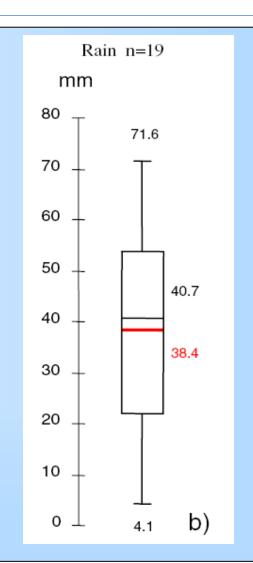
TVs politiske makt

Wet West Coast.... but what matters? Wet and happy. A group of tourists defied yesterday's weather-Gods washing the West Coast, and went on sightseeing through Bergen. Their good holiday mood could not be destroyed by flushing rainfall.



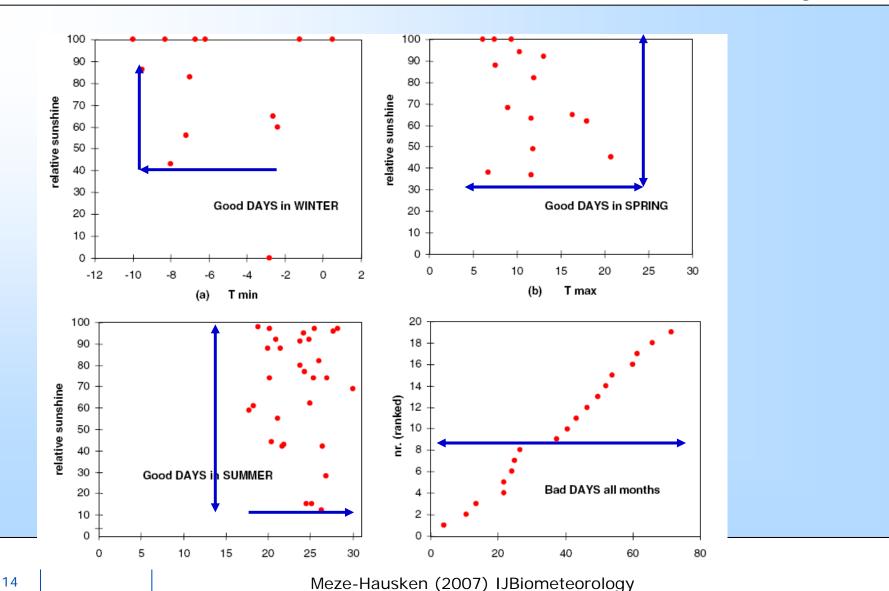
### Temperature range when mentioned as a beautiful day / Rainfall range for bad weather days







### Combined sun-temperature conditions for "nice weather days" and rainfall-rank for "bad weather days"





#### **Context counts**

**Experiences Needs** and Wants **Expectations Past** Present **Future** 

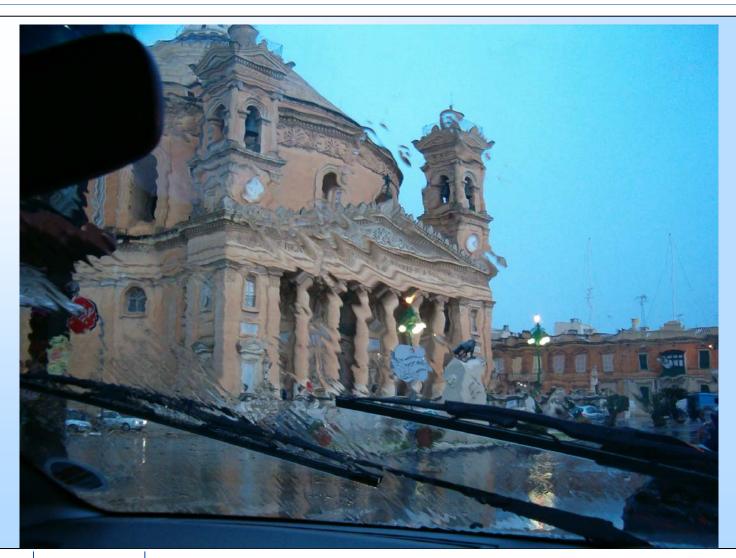


It must be happiness, say people in Bergen, to become 100 years old and die with Wellingtons and an umbrella in your hands. Having lived for 100 years in Bergen means one has experienced around 28,000 days with rain and has owned nearly as many umbrellas.





### Climate Perception and Culture

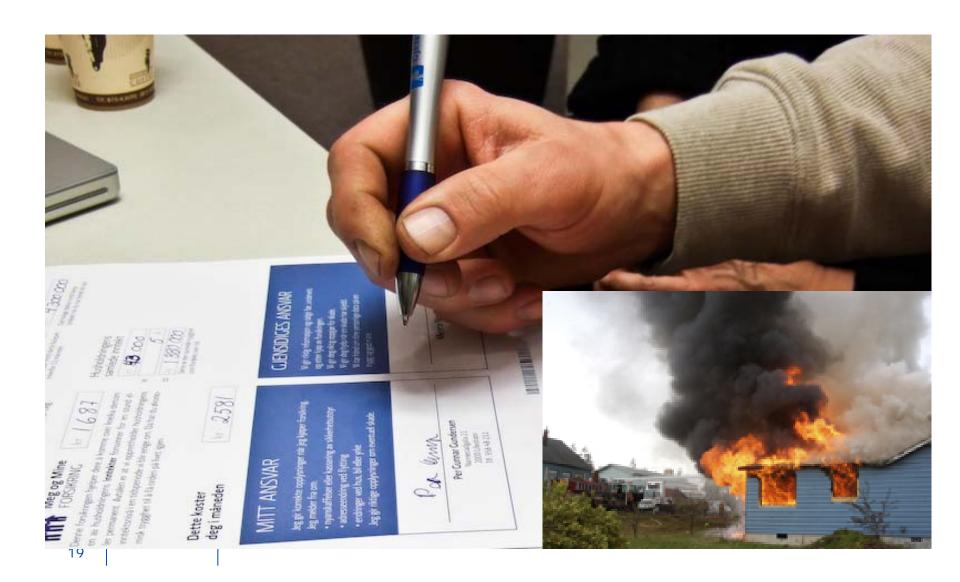




# Climate perception and communication in the Insurance business



### Protecting against uncertain futures







### Non-persuasive communication

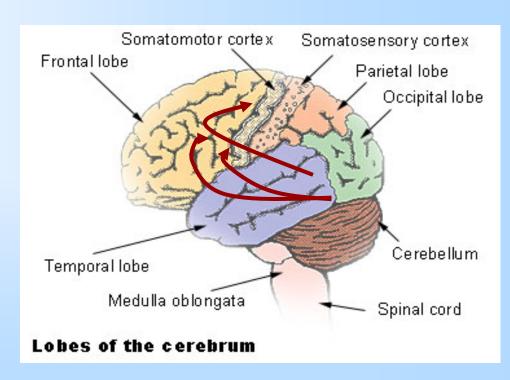
- giving the people the information that they need in order to make their own decisions in an autonomous way
- only tell the few facts that are really most relevant, otherwise you'll loose people's attention
- "Overselling climate change"
- ☐ (more) information alone is not sufficient to cause the audience to change their perception or a behaviour in a desired direction





### Rational behaviour versus emotions

- □ you cannot assume that the recipient the audience is processing the information analytically, and thus making rational, deliberate decisions!
- Emotions, values and feelings
- □ Positive associations stimulate reward system in the brain.





### Climate perception and building styles



Hordaland Fylkeskommune



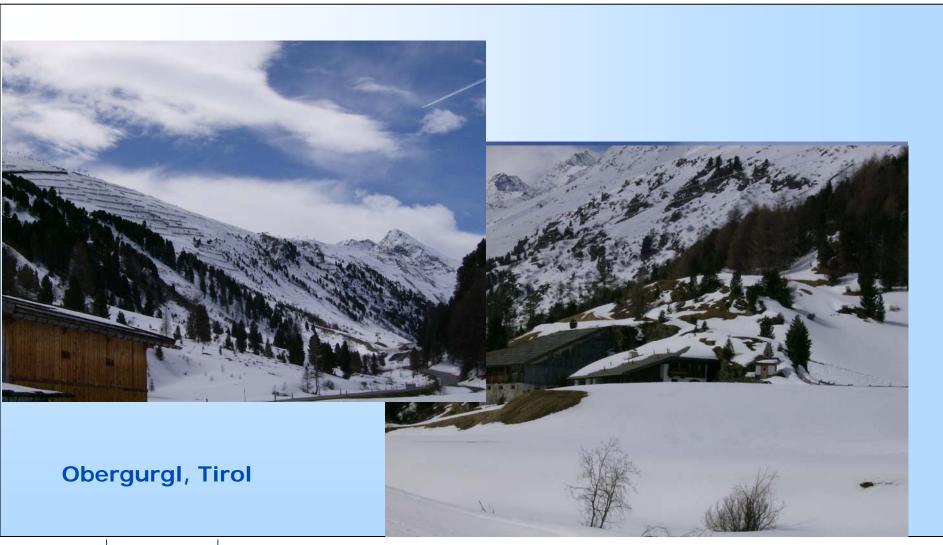


### **GJENSIDIGE** Climate perceptions and spatial planning Coast





### **GJENSIDIGE** Climate perceptions and spatial planning Mountain regions





#### I have a dream.....

Martin Luther King – he did not say "I have a nightmare, people"

-> tell positive visions, messages of hope, rather than doomsday future







#### Some preliminary conclusions

- □ <u>Climate statistics</u> give <u>only one side</u> of the picture about climate <u>vulnerability</u> and adaptive potential
- ☐ Perceptions indicate how people think and in a second step, response to climate (variations and change)
- □<u>Traditional adaptation</u> to weather hazards need to be revived and adapted to modern conditions
- ☐ Insurers need to focus strongly on climate risk prevention and adaptation. In order to achieve this goal it is important to acquire adequate knowledge about peoples' perception and use this for risk communication.

