Keep the Balance

10 approaches to sustainable storage facilities

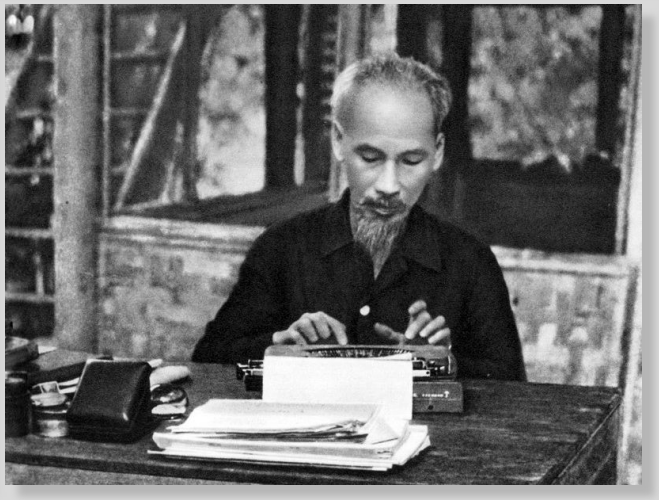
Auktionshaus Weidler, Nürnberg

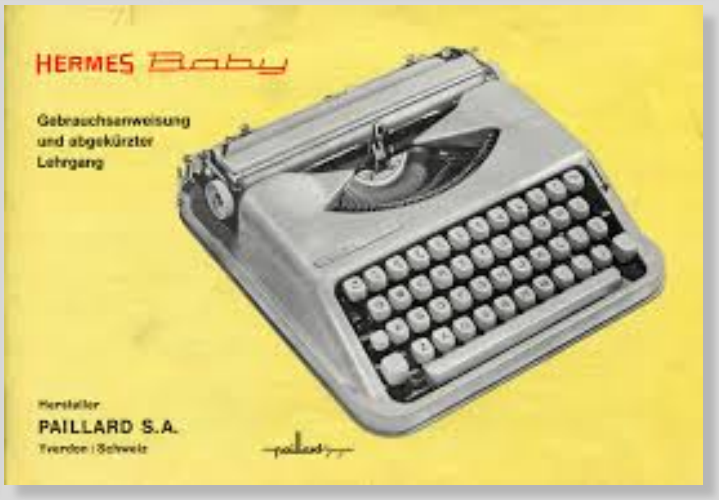
Too much of everything?

Too much of everything?

sources: internet

The context makes it work





Quellen: Internet

Not every object makes sense everywhere

I, Type Writer Museum, Partschins (Südtirol)

Image: Rudolf Bloch

Every collection needs a policy

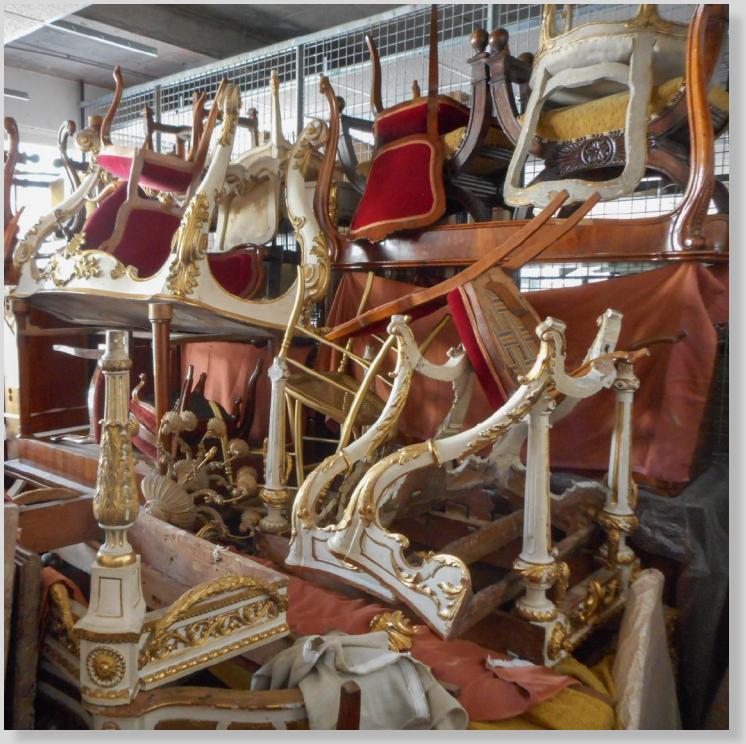


Image: Prevart

Image: Zoologische Sammlung Uni Rostock

Chaos vs. well kept system

A collection policy that is …

. . . focused on the future

source: internet

A collection policy that is …

. . . don’t look back

source: internet

A collection policy that's ...

. . . focused on the future

. . . focused on its strengths

source: internet

A collection policy that's ...

. . . focused on the future

. . . focused on its strengths

. . . eliminating its weaknesses

source: internet

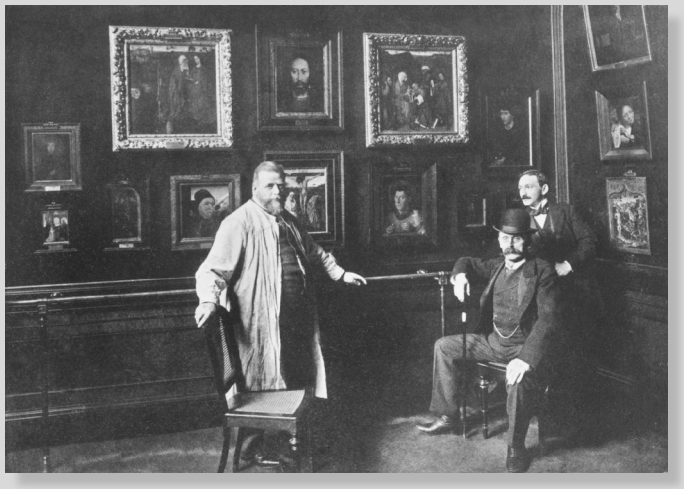
A collection policy that's ...

. . . focused on the future

. . . focused on its strengths

. . . eliminating its weaknesses

. . . creating confidence



bpk / Zentralarchiv, Staatliche Museen zu Berlin

What is a storage facility?

A storage facility is above all a repository for cultural heritage objects.

D, München, Stadtmuseum

Image: Prevart

What is a storage facility?

A storage facility is above all a repository for cultural heritage objects.

It provides reasonable protection to cultural heritage.

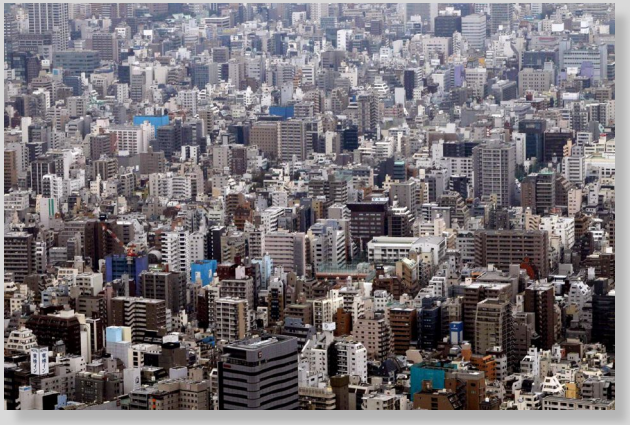
D, München, Stadtmuseum

Image: Prevart

source: internet

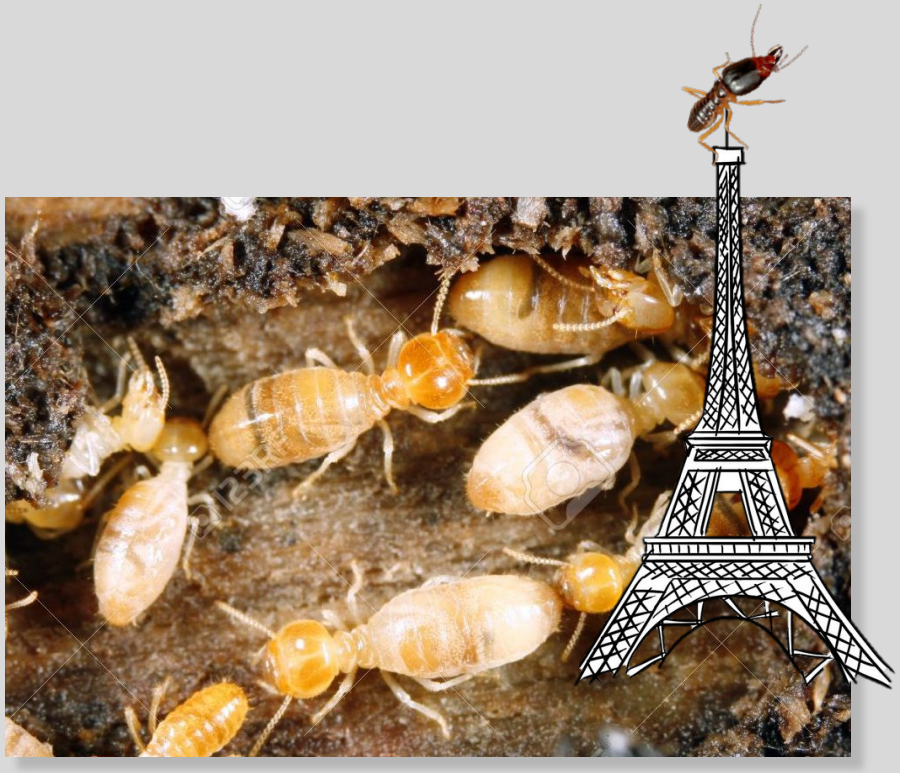
3 big challenges for cultural heritage preservation

Storm on dalamtic coast



JP, Mega City Tokyo

1. Climate change



Termites

Quelle: http://www.greentermite.com.au

CH, Sarnen, flooding of cloister treasure 2005

1. Climate change

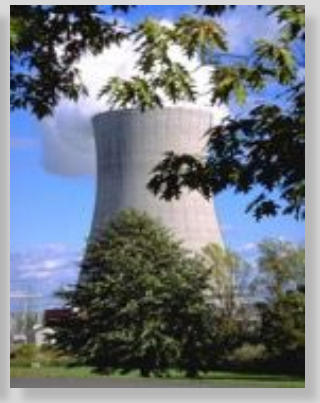
«Our house is still on fire. Your inaction is fueling the flames by the hour.
And we are telling you to act as if you loved your collection ~~children~~ above all else.»

Greta Thunberg at the World Economic Forum, Davos, January 21st 2020

2. Use of ressources

- land
- material
- energy
- money




3. Contamination

- Biocides (DDT, Lindan, PCB ...)
- Volatile particles (fine dust, Ozone, VOC ...)

DDT-Cristals on wooden plank 2009 Quelle: Wikipedia

Steelindustrie in Benxi (China 2013) Image: Andreas Habich

Storage facilities compared - Where are we today?

CH, Schwyz, Archive Tower

F, Paris, Bibliothèque Nationale de France

Building strategies I (location)

past	present	future
intelligent location choice	“do what you like” – technology will fetch it	Intelligent location choice
	energy doesn‘t matter	outside high risk zones
		not in water

CH, Sitten, Valeria

D, Köln, Chocalate Museum (2005)

Building strategies II (materials)

past	present	future
durable materials	short living materials and composite systems	durable materials and durable systems
massive and/or simple construction	lightweight, but energy consuming constructions	optimizing of material use, construction and technologies
low tech (experience)	high tech (expensive)	”intelligent” low tech

I, roman wall

D, München, Alianz Arena (2005)

Building strategies III (maintenance)

past	present	future
little maintenance	complex maintenance	simple maintenance least possible main- tenance
simple maintenance	replacement of components	repairable

E, Dominio de Aranleon / Burjassot

air conditioning system

Building strategies IV (climate)

past	present	future
no standards, experience	narrow standards, *not* experience based	"intelligent" guidelines, experience
seasonal adaptive climate	same climate all year	seasonal adaptive climate
passive climate natural ventilation	active climate control	"intelligent" passive climate control
		natural ventilation

IR, Abarkuh, wind tower

air conditioning ducts on roof

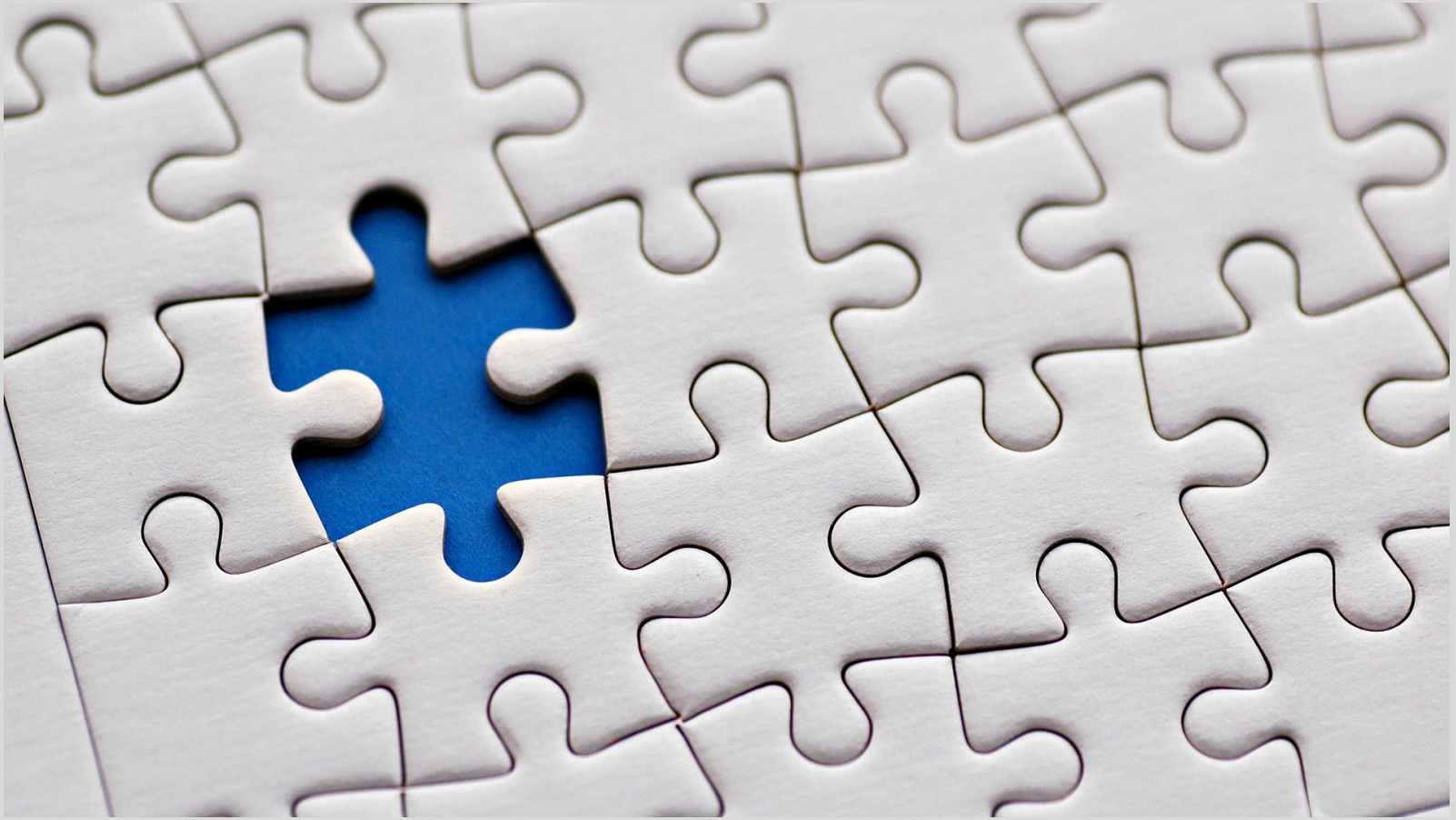
Building strategies V
(energy consumption)

past	present	future
no or little energy consumption	waste of energy	least possible energy consumption
low operating costs	high operating costs	low operating costs

GR, church on Santorin island

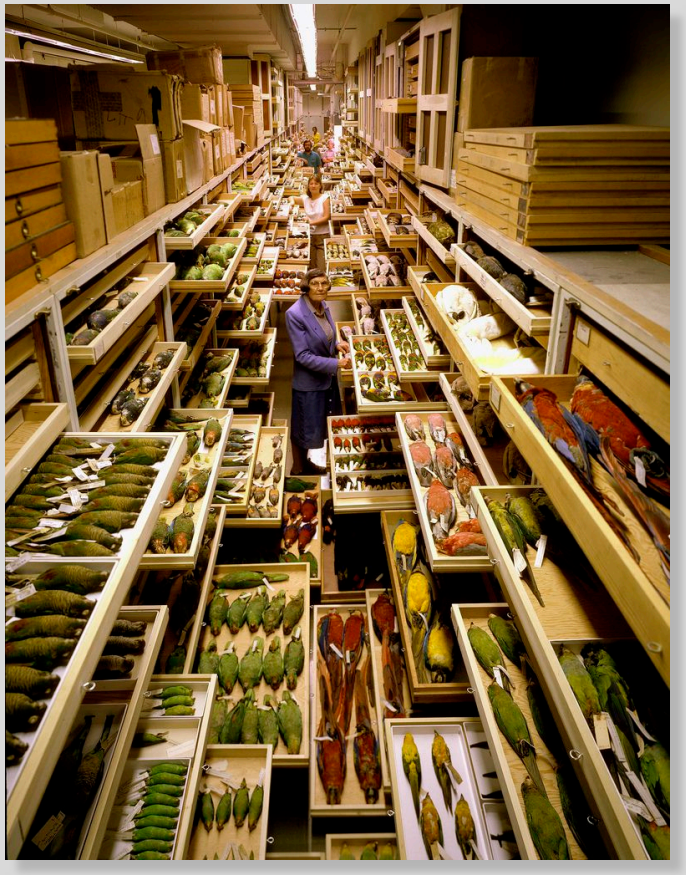
GB, Norwich, Sainsbury Centre for Visual Art (1977)

10 sustainable approaches for storage facilities



1. A thoughtful collection policy for every collection

- Why do we collect?
- What is our aim in collecting?
- What are we collecting?
- What do we *not* collect?
- What are the criteria to accept an object as an entry to the collection?
- How can we improve the quality of our collection?
- How do we store our collection?



USA, Smithsonian NMNH, Washington DC

A Museum Storage is *not* a Flee Market

N, Bergen, second hand shop

Image: Kevin Rechsteiner, 2015

2. Keep only what is worth to be kept

- very restrictive collection growth
- entry in the collection only according to collection policy
- no redundant objects (internal, local, regional)
- „keep best object available only“ (condition, context, quality, content, message)

source: internet

3. Minimizing Risks

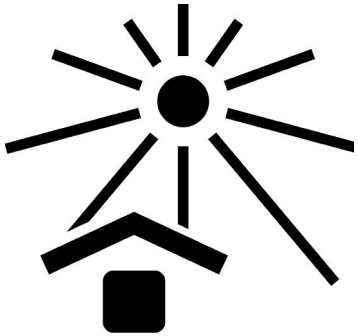
Every object is affected by several different risks which combine to the over all risk an object is prone to.

It‘s the aim to minimize the overall object risks on long term by using the available resources at their best.

= long term preservation

3. Minimizing Risks

humidity



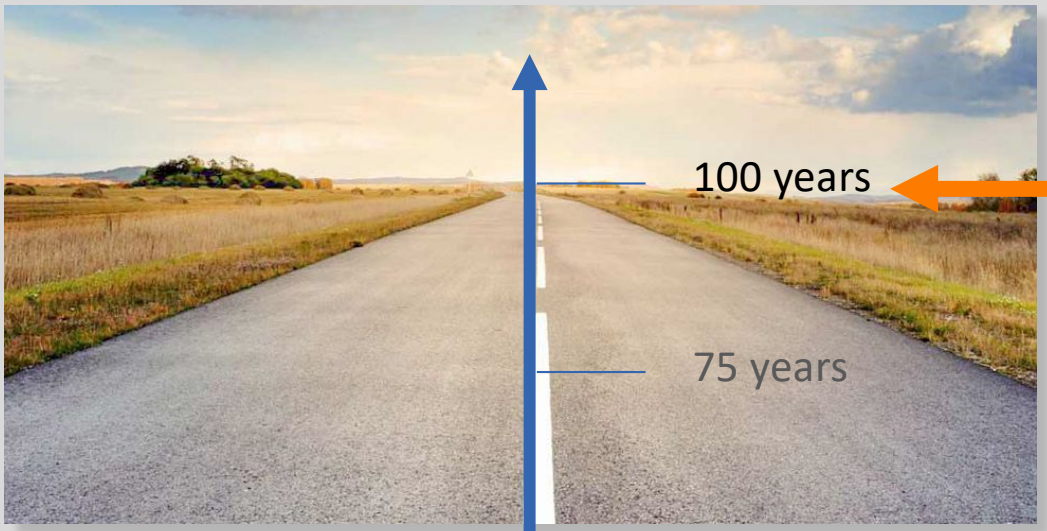
light / UV

temperature

pests

particle protection

theft



100 years — Horizon 100 — 4. generation

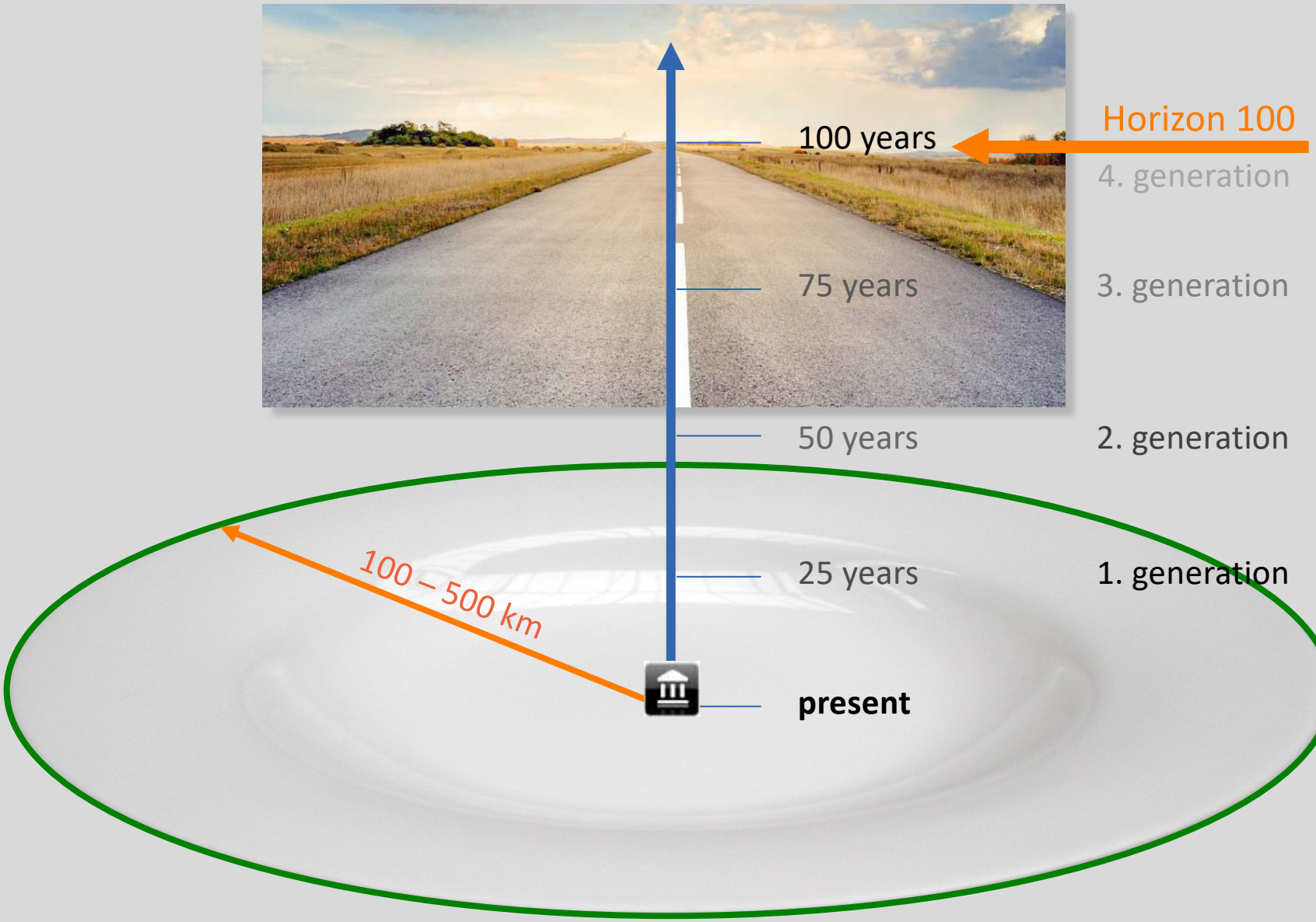
75 years — 3. generation

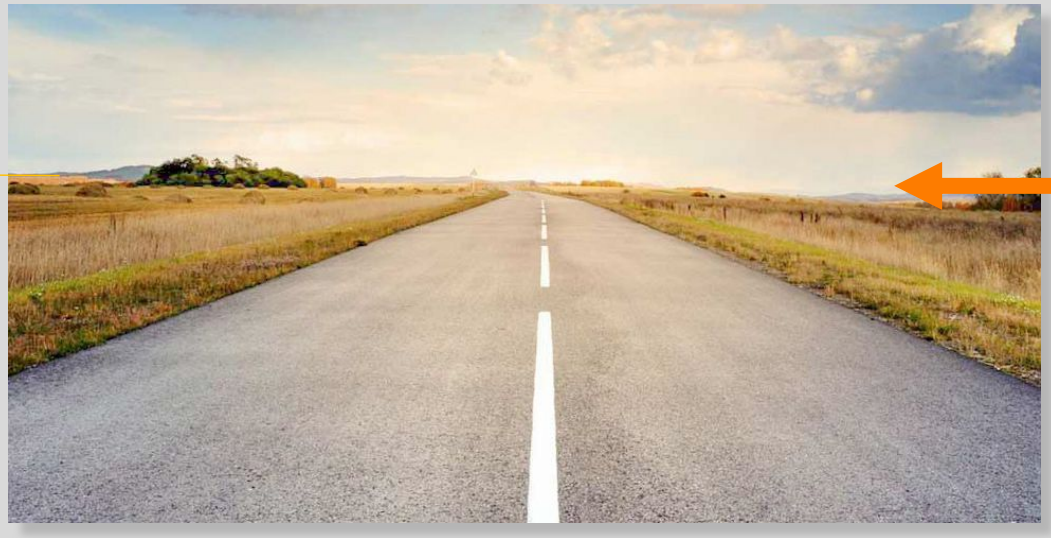
50 years — 2. generation

25 years — 1. generation

present

What shall we do **nowadays** that in a 100 years time the most relevant part of our collections still remains.

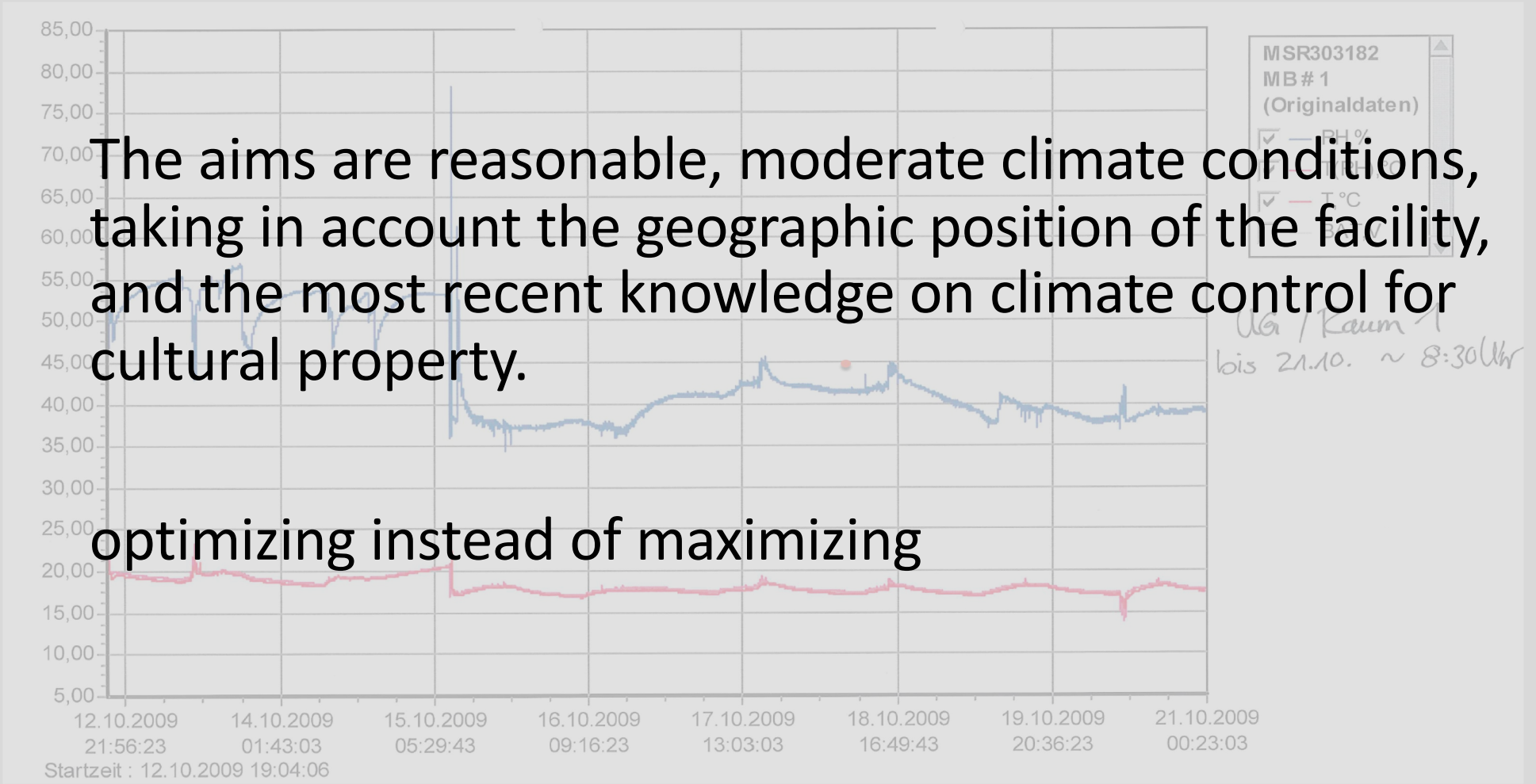




Horizon 100

reasonable
action

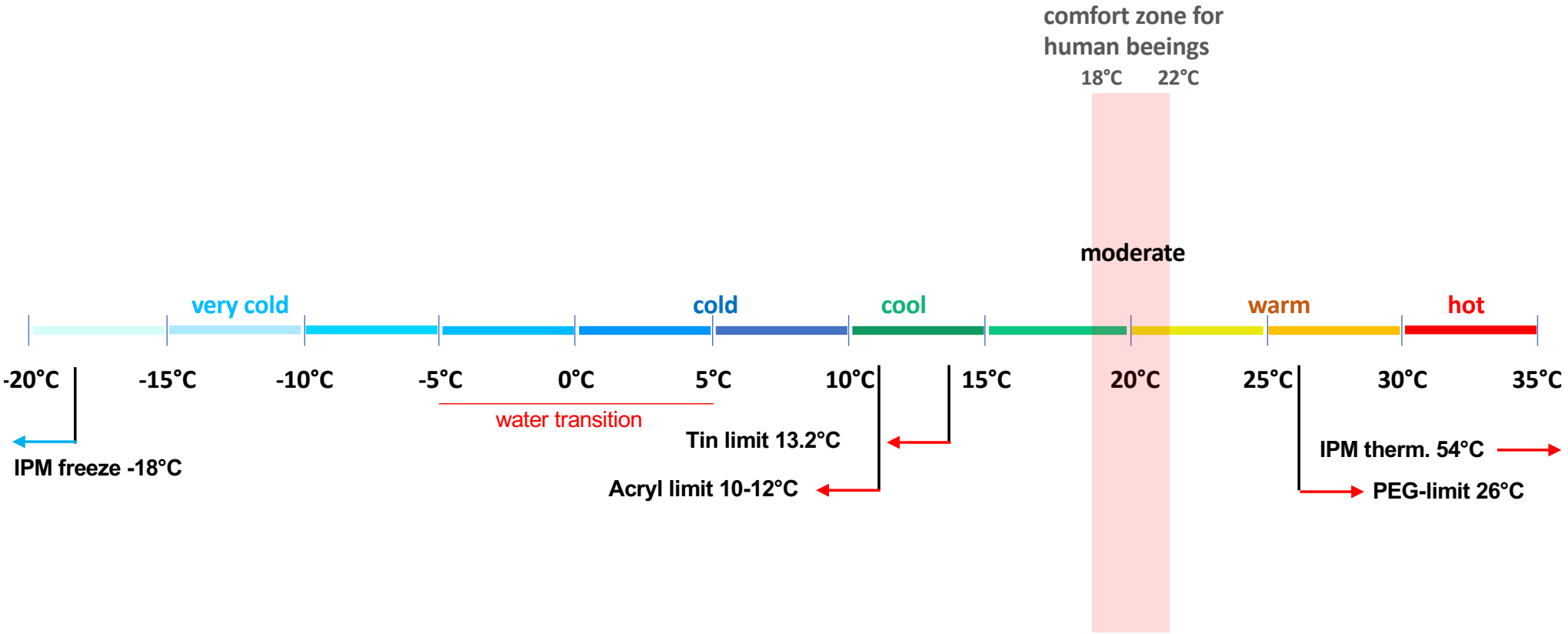
4. Realistic climatic specifications



The aims are reasonable, moderate climate conditions, taking in account the geographic position of the facility, and the most recent knowledge on climate control for cultural property.

optimizing instead of maximizing

4. Realistic climatic specifications



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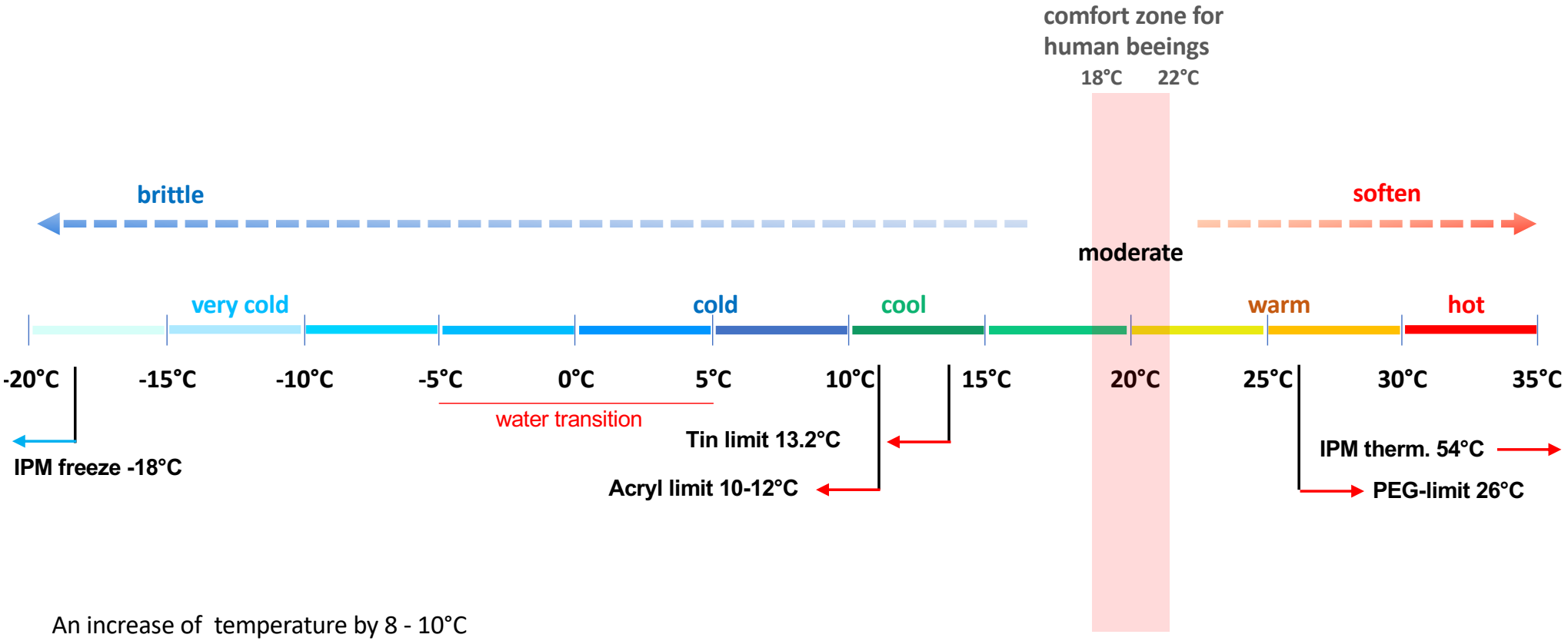
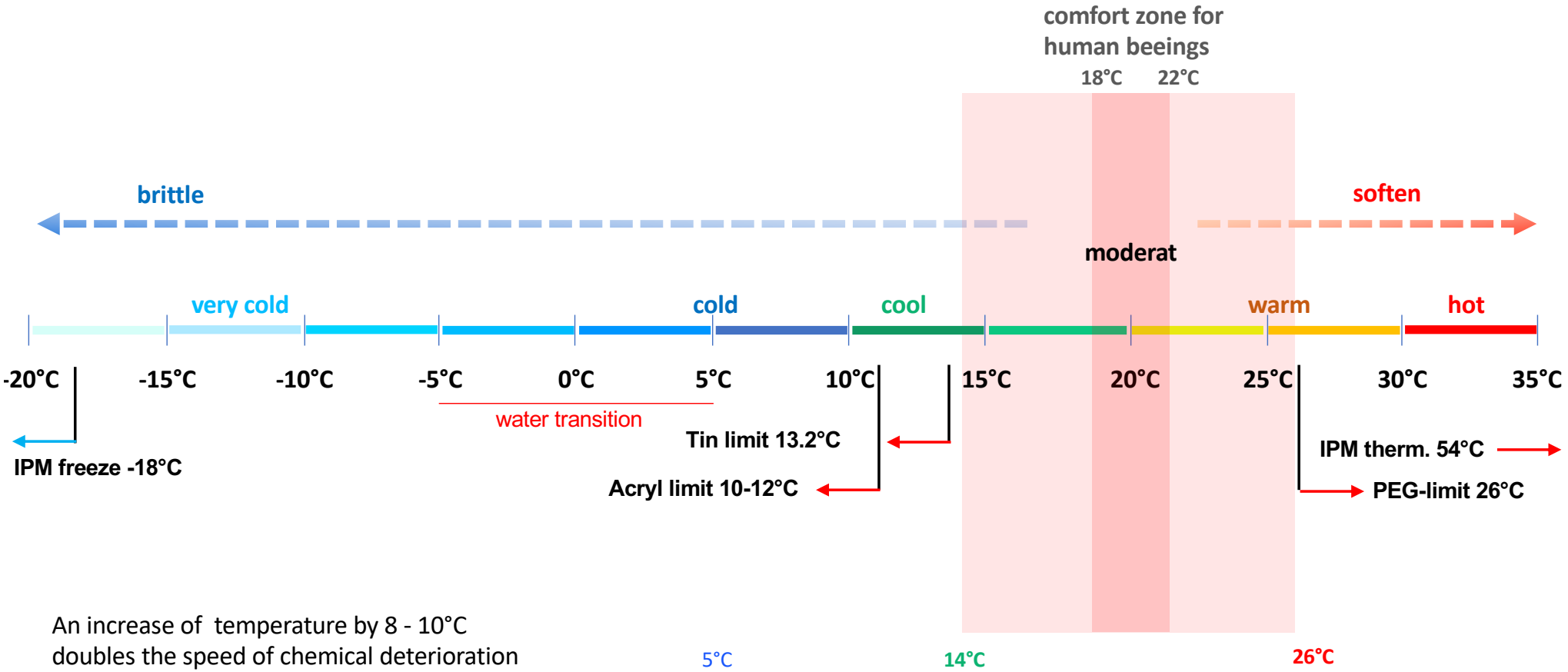


An increase of temperature by 8 - 10°C
doubles the speed of chemical deterioration

5°C 14°C 26°C

4. Realistic climatic specifications



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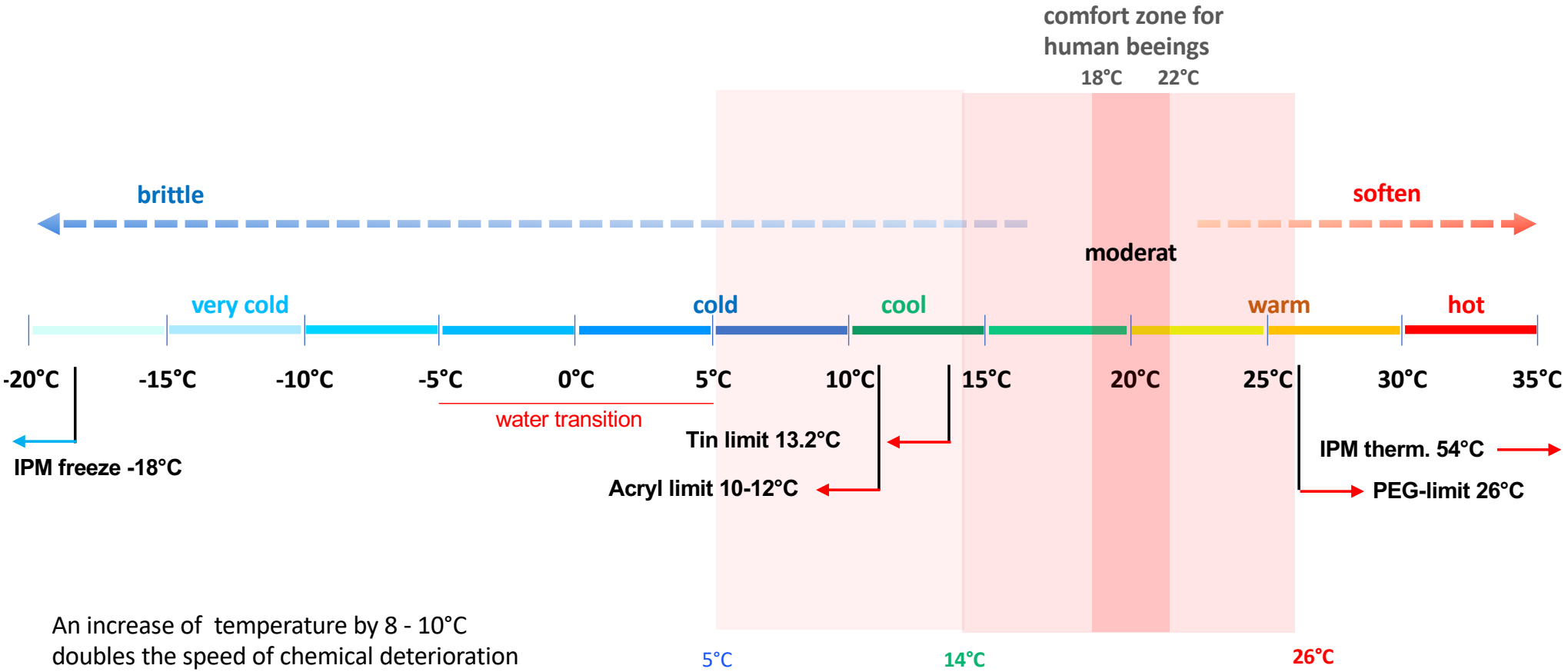

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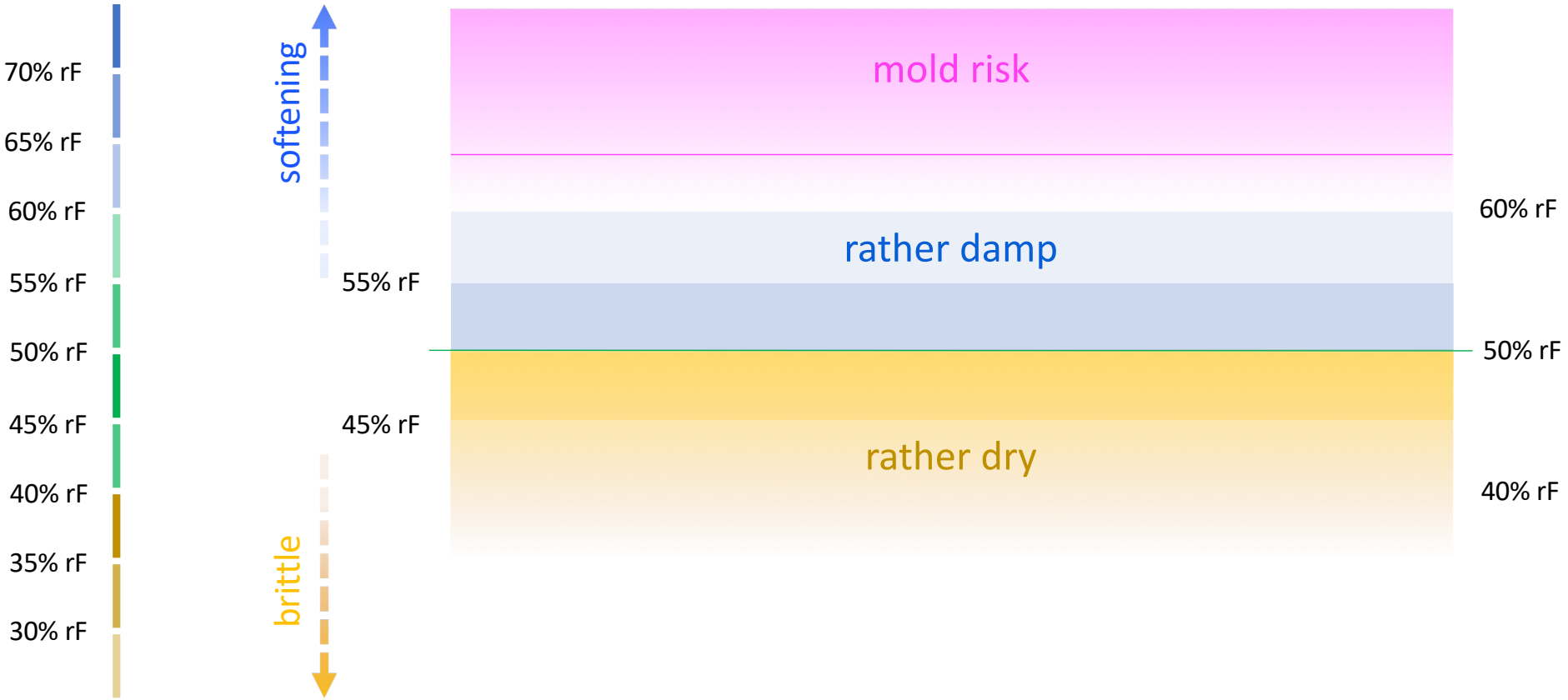

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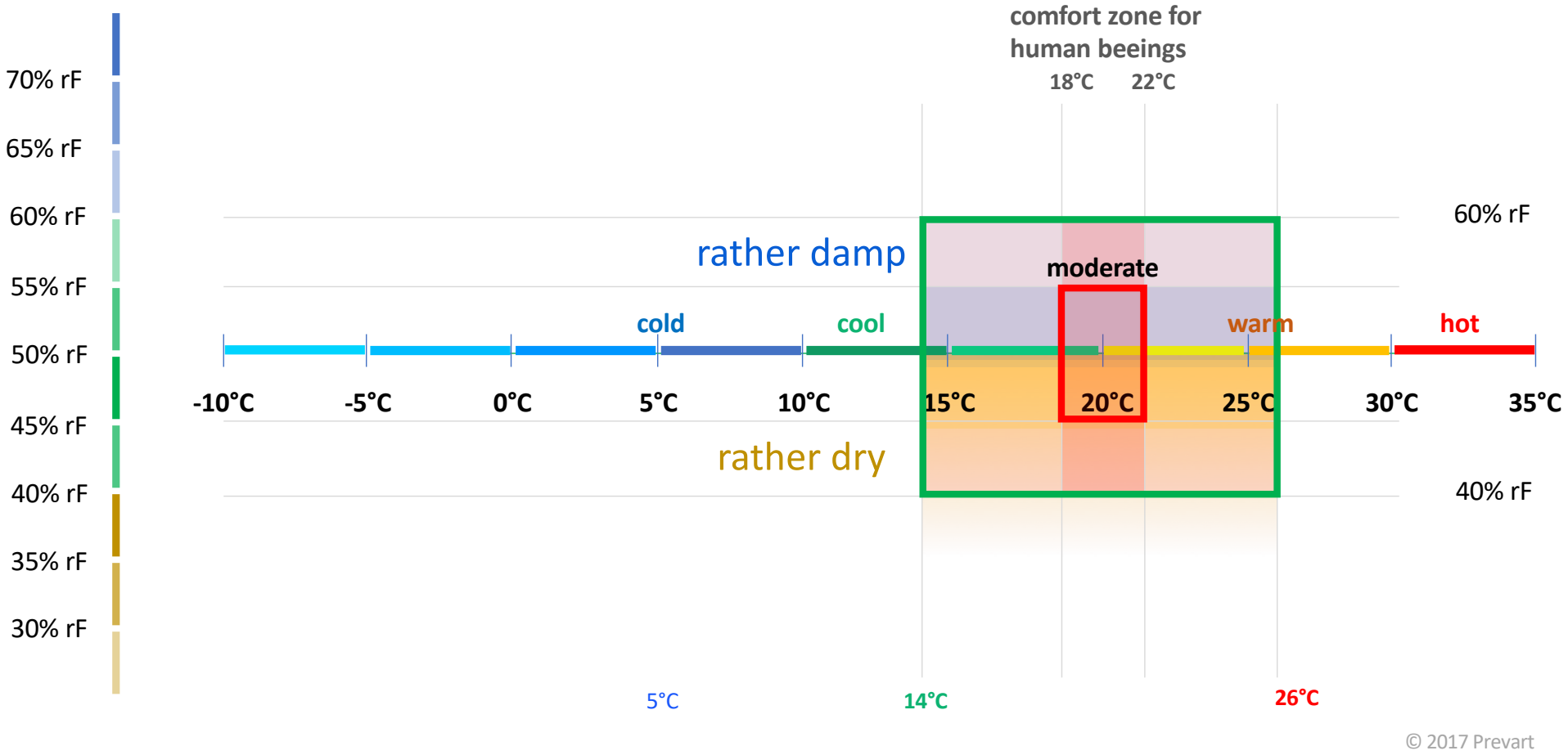

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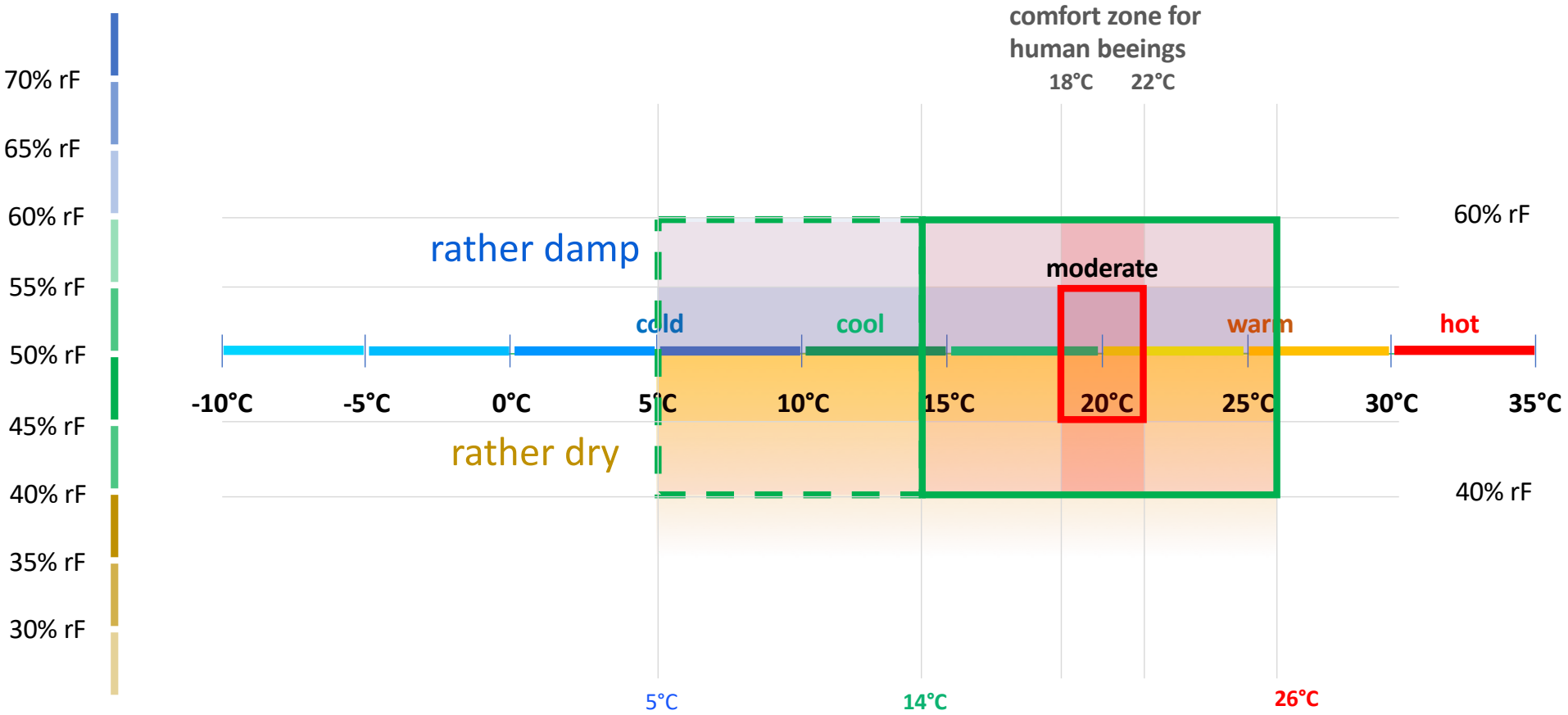

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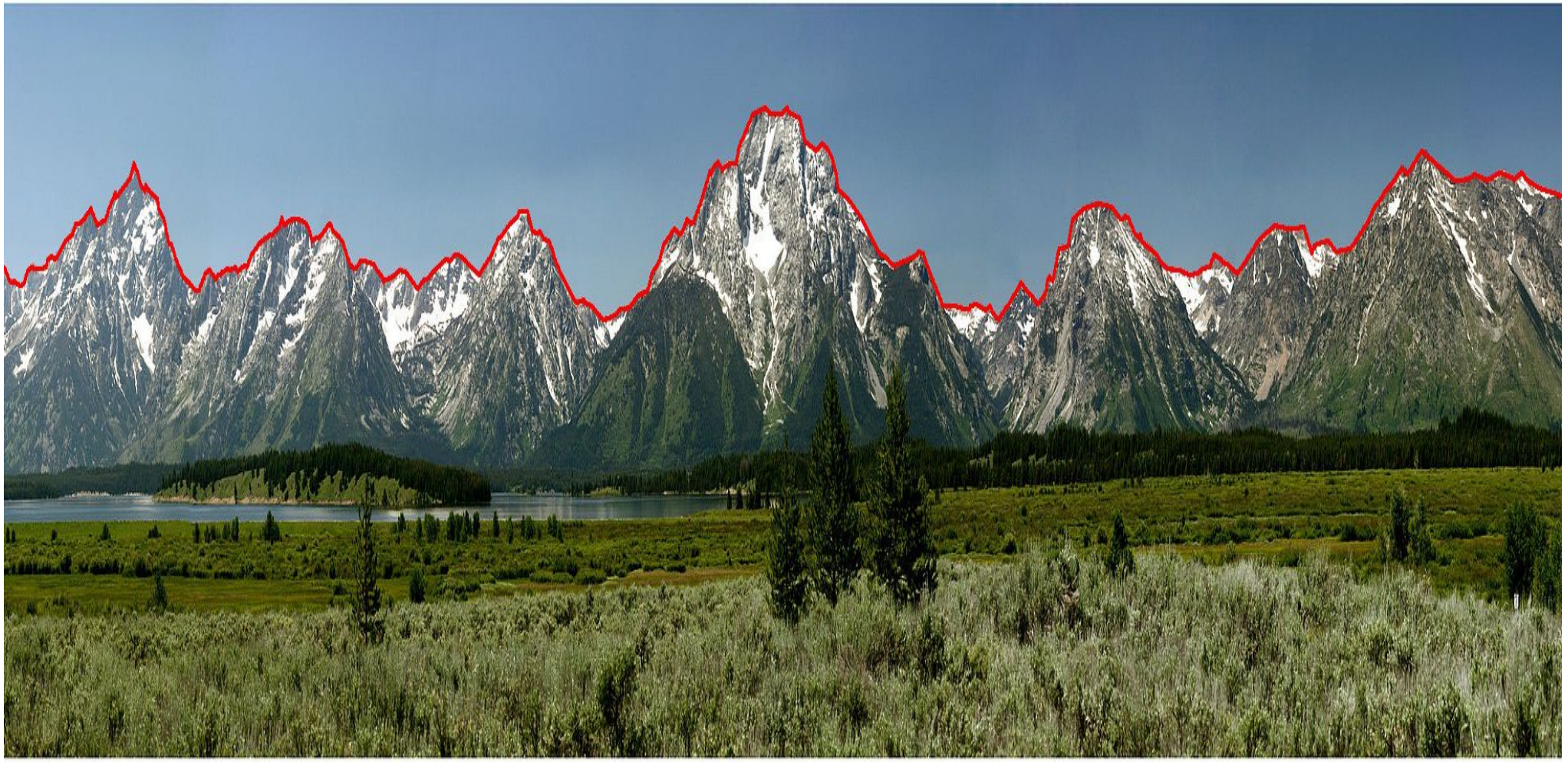

fluctuations

4. Realistic climatic specifications

fluctuations

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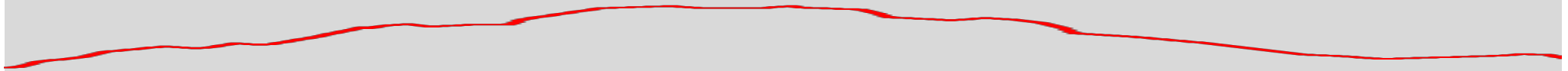
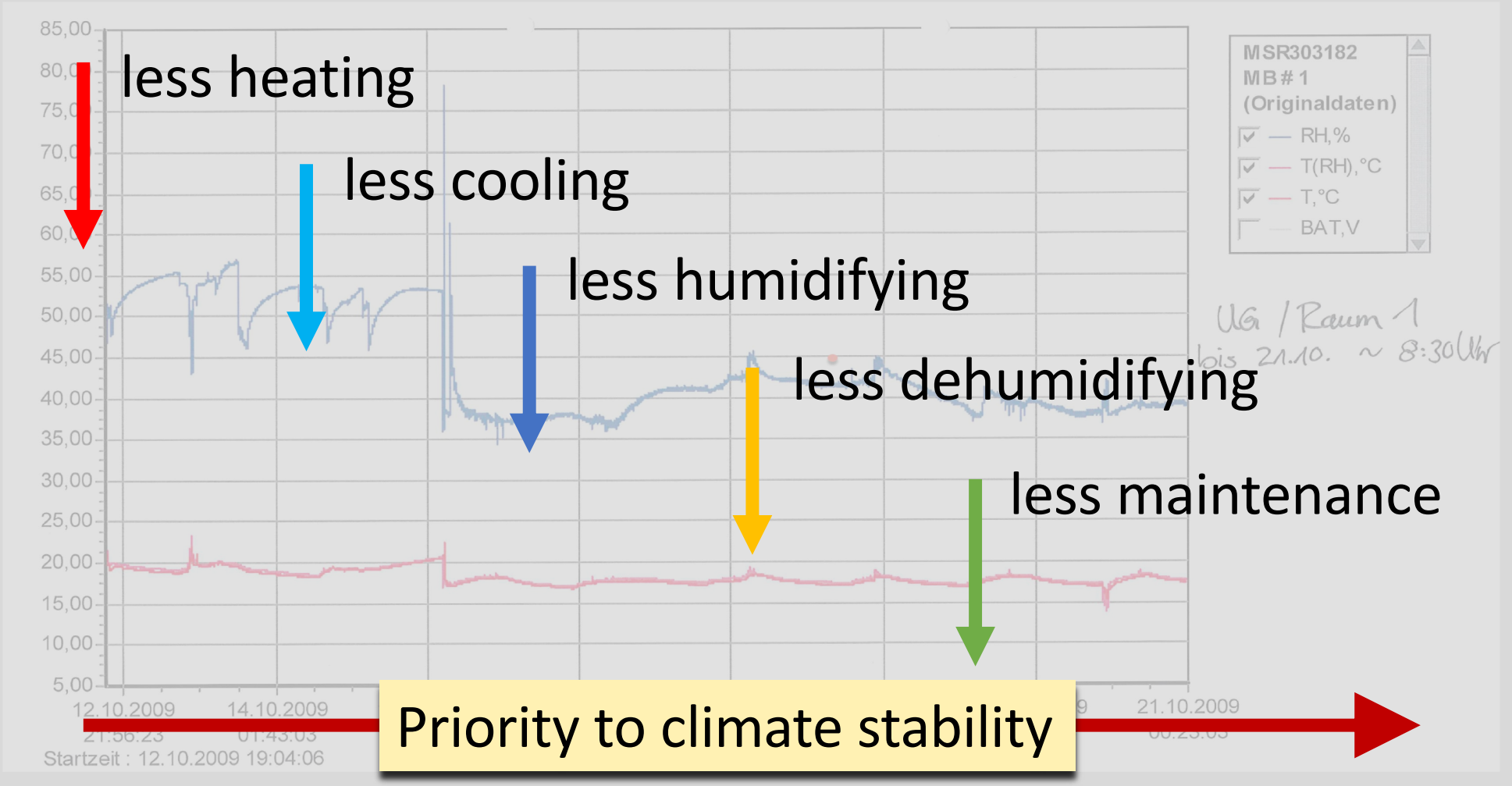


fluctuations

4. Realistic climatic specifications



5. passive instead of active

Passive actions are to prefer over active actions (e.g. air condition) to keep the use of resources as low as possible.

IR, Abarkuh, airing chimneys

Extensive active climate control

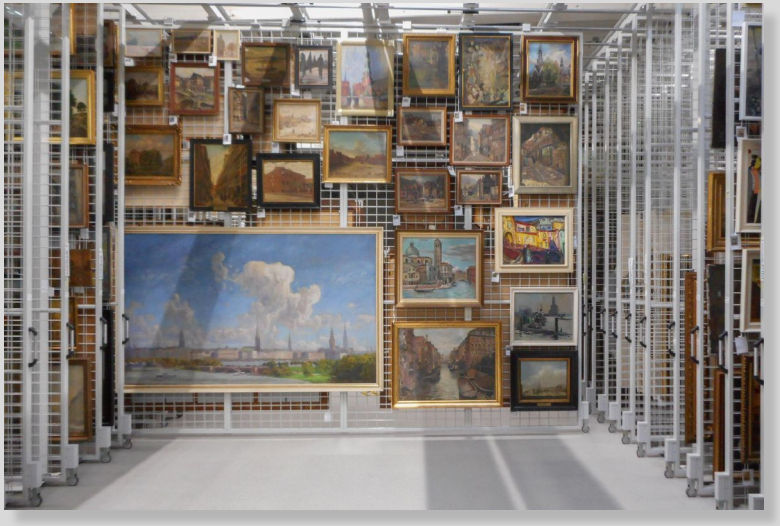
6. The 95% to 5% - principle

It‘s the aim to find a good solution for 95 % of the cases – and to find compromises or special solutions for the remaining 5% of cases.

Do not head for 100% perfection

7. Reasonable demands for storing our precious collections.

It is the aim to meet the requirements of our collections in storage, considering their need, their cultural value and our financial resources.



Paintings on movable rack

Image: Prevart

Paintings on mobile shelves

Image: Prevart

8. Compacting Storage

The goal is to store in a compact way to reduce over all space needed

a compact room volume
is cheaper in investment and more reasonable to run (CO_2 footprint, energy consumption).

César Baldacchini, Compression Renault 977 VL 06, 1989

9. Reduce Contamination

Worrying levels of biocides found on cultural heritage

Goal is to protect staff and reduce over all contamination

- dividing space
- seal objects
- higher air exchange
- cleanness, cleaning
- deaccessioning

10. Systematic IPM

As biocides are no longer the choice to fight pests, systematic IPM is getting more and more important

- pest control
- cleanness
- tight building
- double door system (sluice)
- reasonable storage equipment
- reasonable climate

one more goal …

humility and modesty . . .

one more goal …

Image: Kay Weisse, Weissenetz.de

I have a dream

I have a dream

How much cultural heritage is enough?

CH, Freilichtmuseum

Image: Prevart

D, Historisches Museum

Image: Prevart

Too much of all and everywhere the same?

It's up to you to decide

source: internet

to us to tackle this mission

It's up ~~to you to~~ decide

source: internet

Fairness

This presentation is available as a handout for download @ www.prevart.ch/download

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