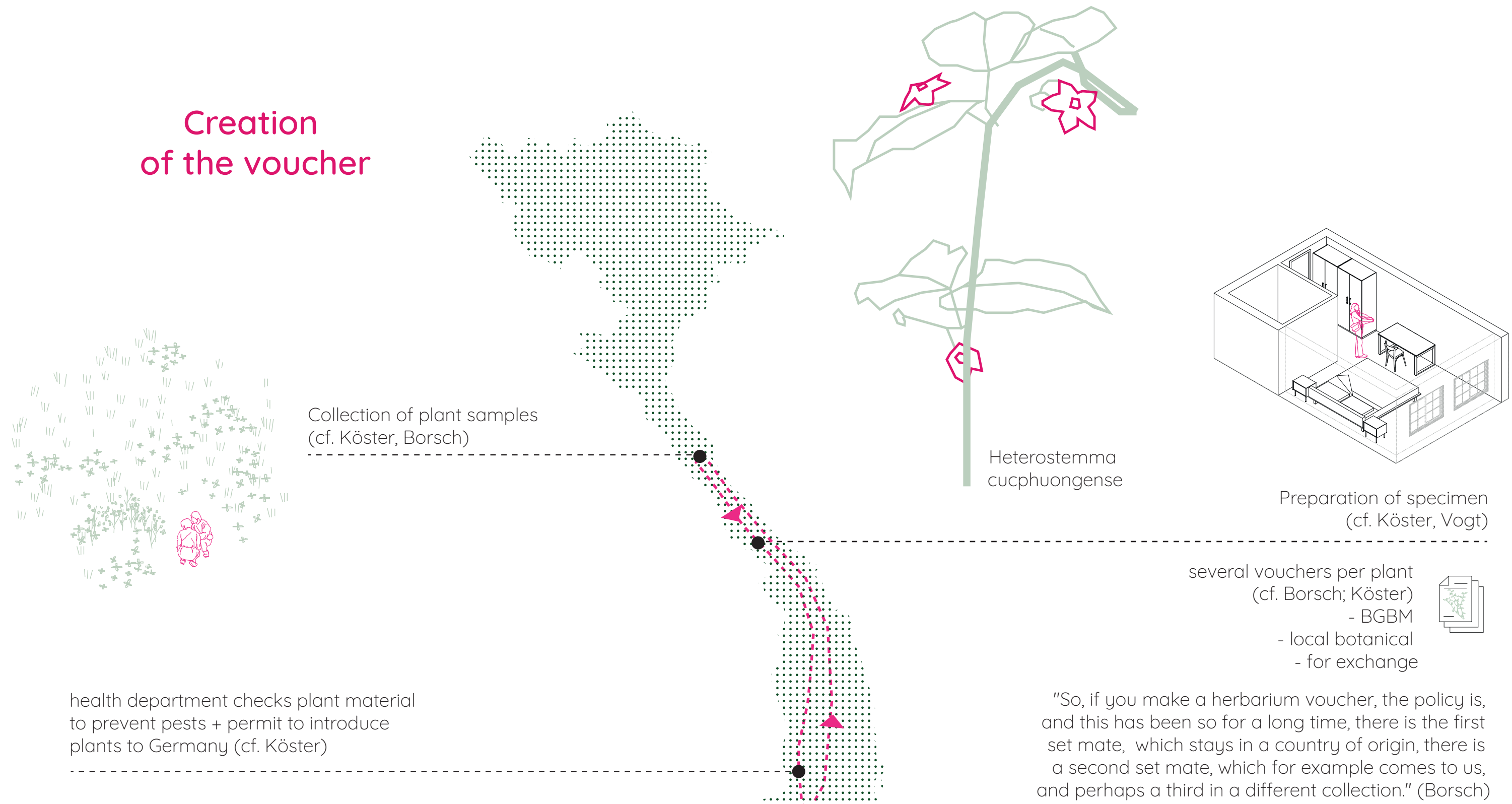


Creation of the voucher

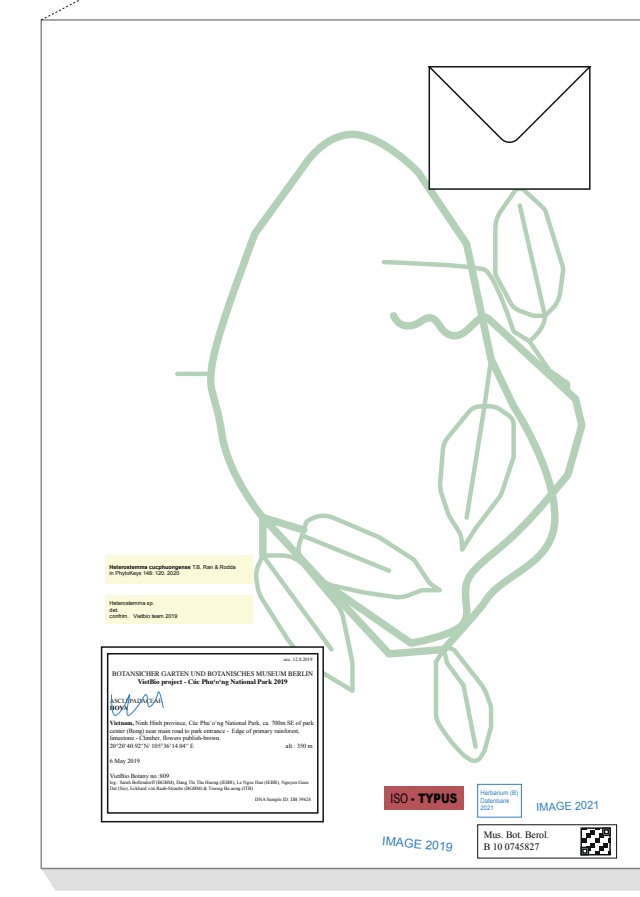


How is botanical knowledge mediated within the Herbarium? How did this process transform through digitalization?

Local network

Virtual herbarium

The BGBM offers on-line access to 657325 specimen records with 329035 high-resolution images from 238 countries from its herbarium holdings.



DIGITALIZATION

Virtual voucher

Re-Figuration of Spaces

CUD

Advantages

- can be searched more flexibly (family, scientific name, collector, country, freetext)
- open access
- > increased speed of work (cf. Güntsch)

Challenge

- keeping analogue and digital collection in sync
- completing meta data (cf. Güntsch)

Meta data

- meta data = what, where, when, who, etc.
- former times: metadata was not deemed important, often not noted
- today: a lot of metadata is missing > detrimental to research
- big task: finding out metadata, sharing and exchanging (meta)data with colleagues from other botanical gardens via direct contact
- problem: mixing up of labels

Digitalising vouchers

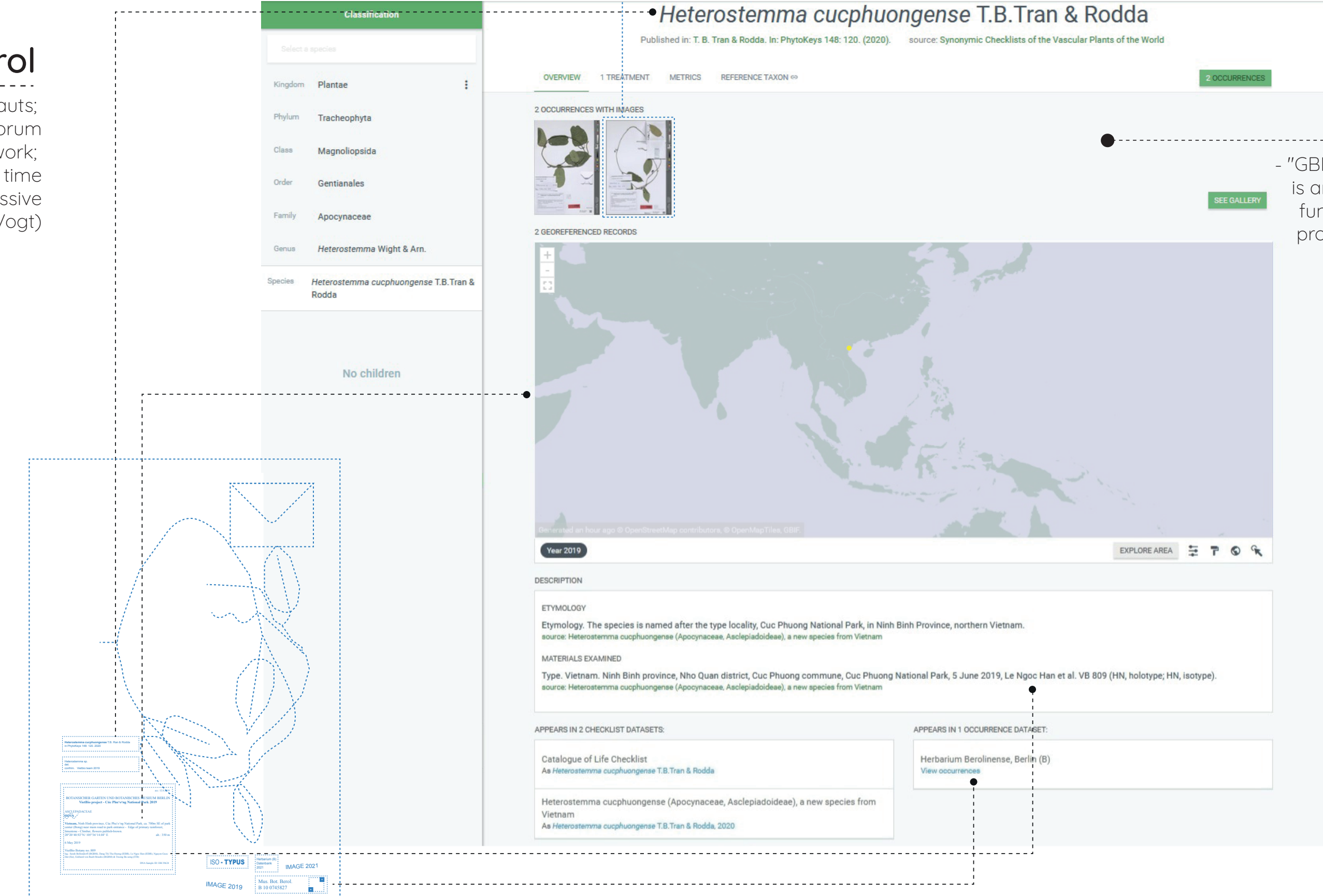
- herbarium sheet is scanned
- adjusting contrast and brightness
- save image (cf. Vogt, bgbm.org)

Digitalising meta data

- via herbonautende
- the Herbonauts (citizen scientists) have access to the scanned labels
- the Herbonauts transcribe information on the label (cf. Güntsch; Vogt)

Quality control

- each item is entered by two (or more) Herbonauts;
- if the information differs there are discussions on a forum;
- very high quality, Herbonauts spend a lot of time with the work; scientists don't have that much time
- forum needs to be moderated so the tone doesn't become aggressive (cf. Güntsch; Vogt)



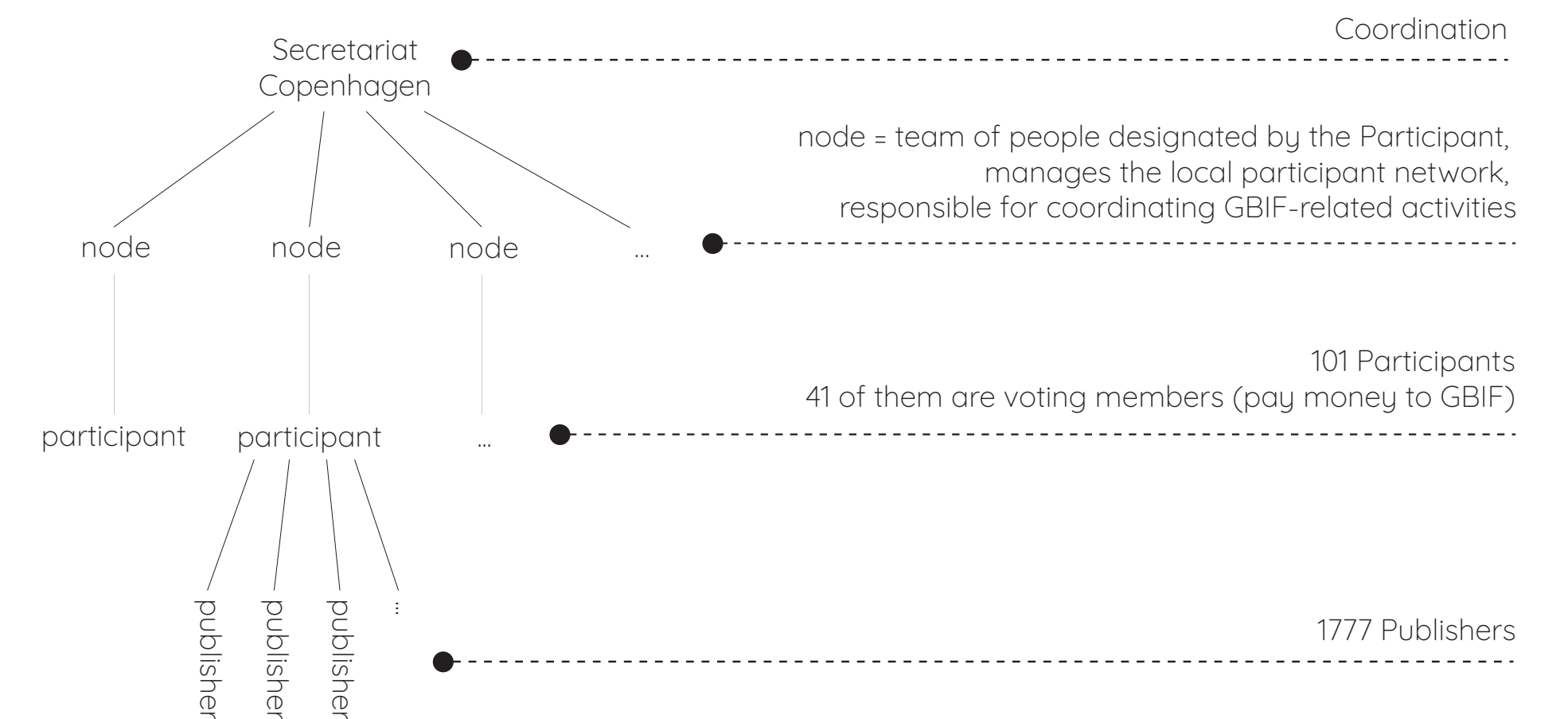
GBIF

"GBIF—the Global Biodiversity Information Facility—is an international network and data infrastructure funded by the world's governments and aimed at providing anyone, anywhere, open access to data about all types of life on Earth." (gbif.org)

- retrieves data from the local databases, does not have its own database (cf. Güntsch; Vogt)

Global network

Organisation of GBIF



Other Networks

There is a number of other networks where the BGBM and its collection is involved. In some cases it is very unclear how the networks work and which collections of the BGBM are represented.

- GGBN (Global Genome Biodiversity Network): DNA and tissue collection, open access
- World Flora Online: collection of all plant species known, open access
- garden4science: living collection, network members and researchers only
- DiSSCo (Distributed System of Scientific Collections): provides infrastructure
- CETAF (Consortium of European Taxonomic Facilities): expert network

Order: Taxonomy

"In biology, taxonomy is the scientific study of naming, defining (circumscribing) and classifying groups of biological organisms based on shared characteristics. Organisms are grouped into taxa and these groups are given a taxonomic rank; groups of a given rank can be aggregated to form a more inclusive group of higher rank, thus creating a taxonomic hierarchy." (wikipedia.org)

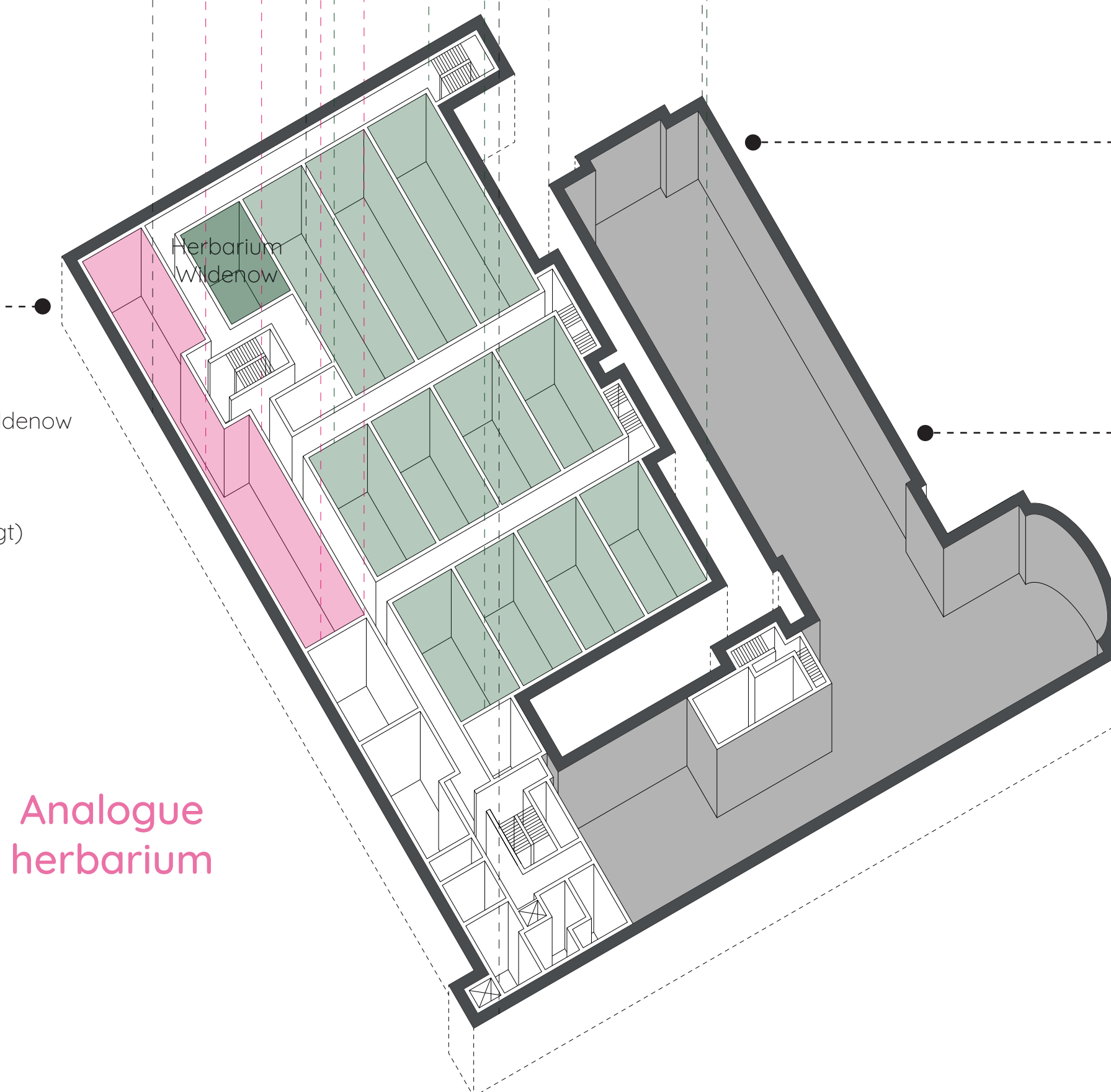
Disadvantages

- can be difficult to access
- inflexible: shelves can't be (re-)sorted quickly, new taxonomic insights often disturb the order, cross references are needed
- limited space (5 million vouchers) (cf. Vogt)

History & Facts

- founded in 1819
- partial destruction in 1943 (WW2)
- half a million specimen could be saved, including the historic collection of C. L. Willdenow
- today: with 3.8 million vouchers biggest herbarium in Germany
- space for 5 million vouchers
- 30,000 new vouchers every year (cf. Vogt) (cf. bgbm.org)

Analogue herbarium



Analogue voucher

