From Manuscript/Board collection 1427, featuring elements in included into the collection documenting Keilhau and Boeck's journey to the Jotun Mountins in 1820 (NLN).

Reading through the draft-application for the development of an infrastructure of re/search for the humanities and social science, based on the material in store at the National Library of Norway (NLN), there is one question that it may be particularly relevant to ask: what difference does it make to start considering the archive material as *bi-modal* (audio-visual) and *tri-modal* (audio-visual-interactive) for the specific take on the *multi*-modality that a digital archive is capable of searching and serving (for instance in the questions relating to photo-authenticity with AI)?

That is, assuming that there are levels of the archive in which interaction is *recorded* at the same level as visual and audio (and that what we see on our screens are *replays* of these records)? Examples of recorded interactions: **1)** adjoining the image a ruler and a colour scale, that were relevant to *older* repro-techniques (or, reference to these); **2)** the folding of paper as a simple interaction design used in letter correspondence [Camilla Collett and Sigrid Undset]; **3)** their combination on field-logs in which the folding-pattern suitable for fieldwork, are used as grids for drawings that then are developed in such a way their *reproduction* would then be referenced.

There are a number of other examples that likely can be added to this list. The point being that a record of interactions convey a *visual* provenance. And also that such records already exist—if not necessarily available to public view—and an important question might be how to make them available: a *provenance* of re/mediation of the photos, similar to the provenance that applies to art-works. Two photos may be face-recognised, yet if their re/mediation differs significantly, it make it easier to separate a staged photo in [Tasmania](Tasmania) from one from taken at the South Pole.

This is one line of questioning. Another, related, question is how records of interaction may some how be looped into the interactions of the users that search and investigate archive materials according to a visual method (partaking of current digital interaction design). There are a number
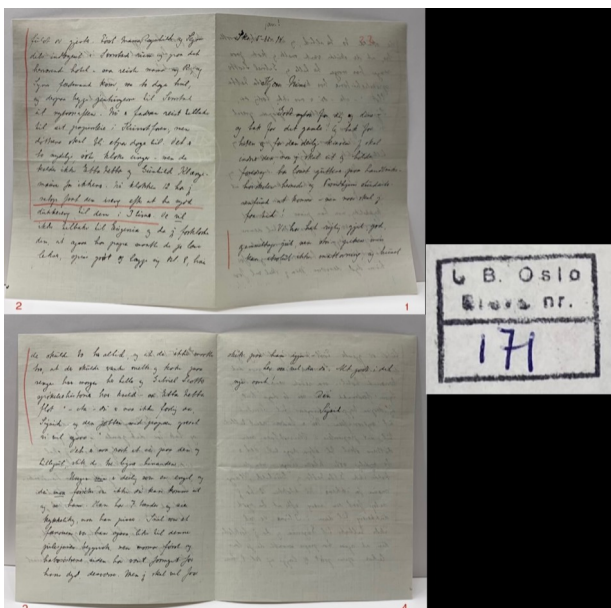


Example of letter-folding practice found in Sigrird Undset's correspondence (NLN).

of documents that have this dual possibility. For example the above selection from B.M. Keilhau and C.P.B. Boeck's field notes. It has been classified as a collection of boards/panels, but also as a manuscript (collection no. 1247). How-ever, by following the visual record and repro-trail, will bring the search a wealth of information different from that of the manuscript trail.

If this path is adopted it means that in addition to *same-similar* relations between photos, is added *difference*: **1)** springing from the re/mediation-provenance; **2)** the difference between image and manuscript; **3)** the life-cycle in different layers of maturity of materials in the archive. The latter comes with the layers emerging with the cultural maturity of certain materials over others: that is, beyond the number of hits, the place of certain documents as cultural references in a broader understanding than others: for instance, Camilla Collett's letter-correspondence (in transcription).

In the book-volume *Science in the archives* (2017), Laurraine Daston provides the reader with some guiding-metaphors that could be handy, if including the interaction-mode are as relevant to a research infrastructure in social science and humanities, as are visual and audio modes. With a reasoning reminding of geological crystal-migration, she distinguishes between 3 cycles in the life of materials in an archive: **1**) *first nature*, determining the kind of records that are in circulation as a project is ongoing; **2)** *second nature*, ones filed for search & storage; **3)** *third nature*, public matter.

Perhaps one could compare these life-cycles with ones in a regular research project: **1)** records that spin off directly from research before they are coded; **2)** records from when the results of the project start ticking in; **3)** the kind of maturity reached when final reports are edited/disseminated. With this comparison, we are of course led to believe that archives are *living* entities, that change or move with the *usership*. That is, the archive as a human-technological compound with cultural processes that spring from knowledge. That is, with use the archive develops a sense of self.

Conjointly, and in the minds of people. Which is why—in the present exploration—*usership* is included into an aspect of the interaction-record: that is the culturally *generative* aspects. Of course, one may argue that there is already theory for this. In-house at the NLN there is the [Archive in motion] project that fairly directly asks all the questions above (and more). Then there is the theory of Deleuze: I find the theory of folds (Fr. *plis*) particularly striking…the playful fold of the self, that follows in the wake of folding criss-cross visual, audio and interaction modes.

Of course, this has also been subjected to critiques: notably, by Deleuze's time-old antagonist [Alain Badiou]. For the present purposes, this critique could be brought down to this: that Deleuze case-based philosophy, would come to a different end if it indeed was *applied* to the case. Which, according to Badiou, it isn't: it moves according to the protocol of simulation, substitution and erasure. Which Badiou argued makes it a case of Deleuze, rather than a case of the case. Who-ever has read Deleuze and Guattari's [minor literature] book on Kafka may have sense of this.

The point being that the acculturation of the *archival self*—which will hatch from usership—will differ from the one conjured by Deleuze, in philosophical gesture. What we are talking about here is the whole *archival provenance*, with its twists and turns. Many people and capacities are involved. Not the least, the *professionals* working at the archive who are (at least potentially) the stewards of this provenance. Not in the sense that there is an objective science of such provenance but in a sense of *expanded* accountability. On which the archive depends to exist.

In sum, by including *interactions*, in the *records* and in its *modes*—that is, as *opus operatum* and *modus operandi* conjointly—the *techno-cultural* character of the coming digital archival venture is caught by the *infrastructure*, instead of being hatched abstractly. There are arguments to support that this will be more consistent with the subject matter of the archive: which, in this case, is *cultural history*. By its impact on knowledge practices, such an infrastructure is likely to facilitate research, but also expand or recategorise what can be achieved under the rubric cultural history.

What may come out of including Oslo National Academy of the Arts (KHiO) into this collaborative venture could be a *trans-/cross- workpackage* working on various implications of visual materials across the project: since the practices of creative takes/involvement of images are assumed to be relatively evolved at KHiO. At the fringe of the infrastructure project, one could foresee that KHiO would highlight the possibility of *exhibitions* in establishing a platform for a maximum benefit from the infrastructure. Thereby involving, in these aspects, [expositions] as an emergent resource.

One that is not predicted by one state of the art, but still would be adequate to bring the usership to the next. That is, given that the pathways of the same, similar, different and other would engage turning the page, every once and again. If these thoughts are interesting a participation from KHiO —at some level—could be foreseen, with the aim of participating and contributing to the hybrid seminar Tuesday October 11th, 2023.

Original photo of the Amundsen team, found in private collection in Australia/Tasmania. Question: where was the photo taken?