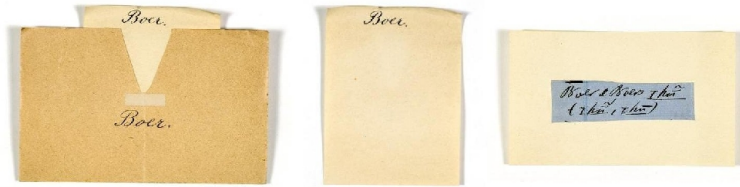


A Visual Dictionary for an Extinct Language



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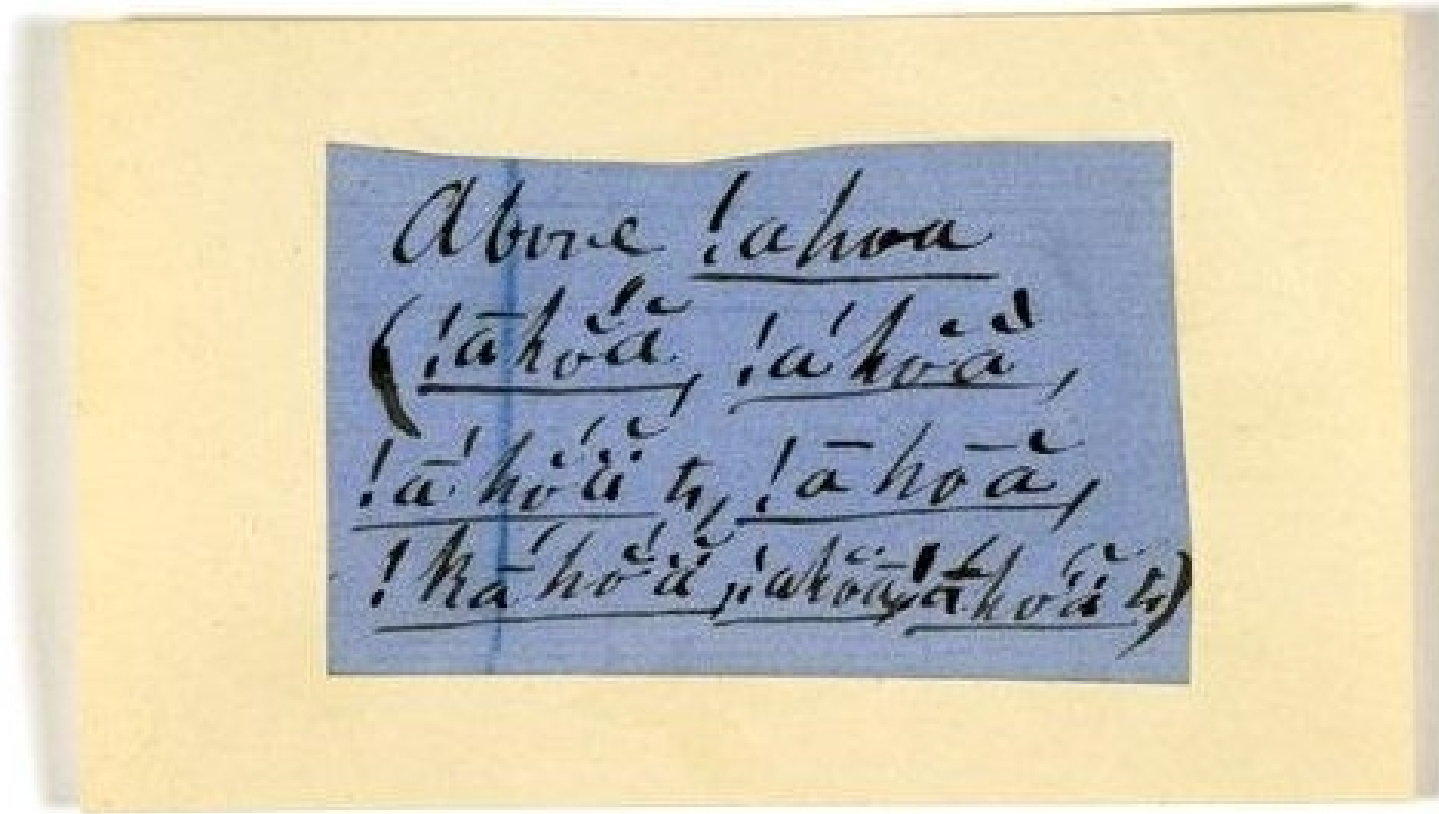
|xam in Modern Use



SA Government
Coat of Arms

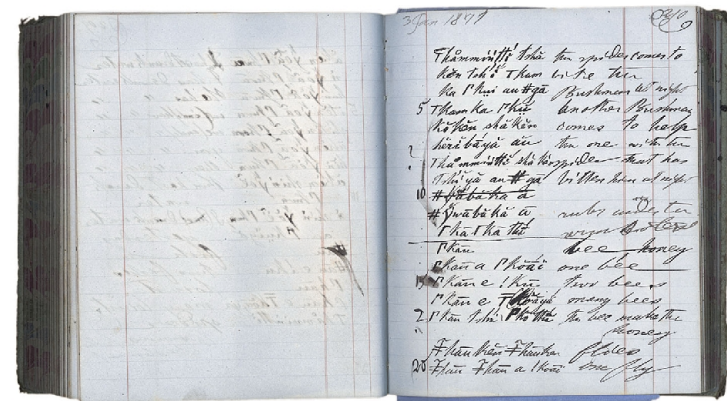


|xam in Historical Documents



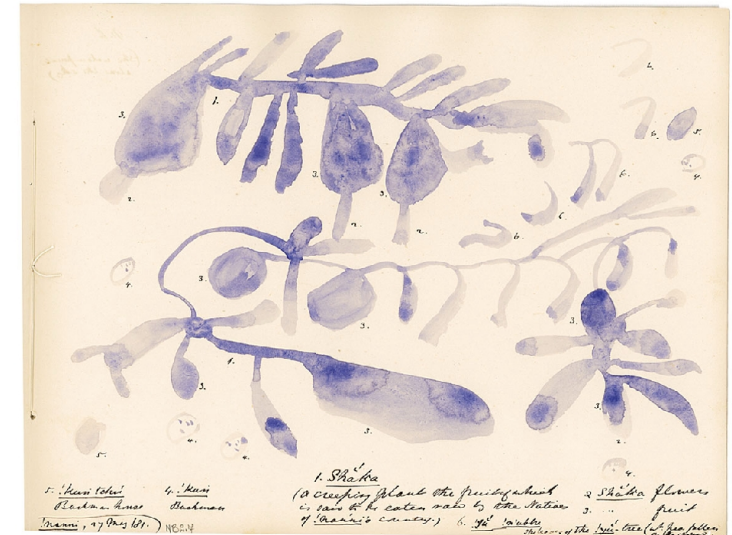
Bleek and Lloyd Collection 1/2

- Books and drawings documenting now-extinct culture of |xam and !kun Bushman groups.
- Documented by Wilhelm Bleek, Lucy Lloyd and others in late 1800s in Cape Town.
- ~14000 page images



Bleek and Lloyd Collection 2/2

- ~800 drawings
- On UNESCO Memory of the World register.
- Curated by UCT/NLSA/Iziko-SAM/UNISA/...
- Digital preservation funded by Mellon, led by Michaelis School of Fine Arts, UCT





Problem and Proposal

□ Problem

- |xam is not easily representable in text, but crucial part of Bushman (and therefore South African) heritage.
- |xam dictionary is available on paper only.
 - All the usual warning bells should be sounding!

□ Proposal

- A digital image dictionary (aka visual dictionary) with appropriate services.



The Data



Bushman OnLine Dictionary (BOLD)

- FEDORA
- JSP
- AJAX



Features: Thumbnails



Notebooks / Story Index / Prayer to a star

Notebooks / Story Index / How the Ichneumon discovered
what the Mantis did with the honey (a second 'right')



Features: Letter Scan



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Features: Cross-Linking

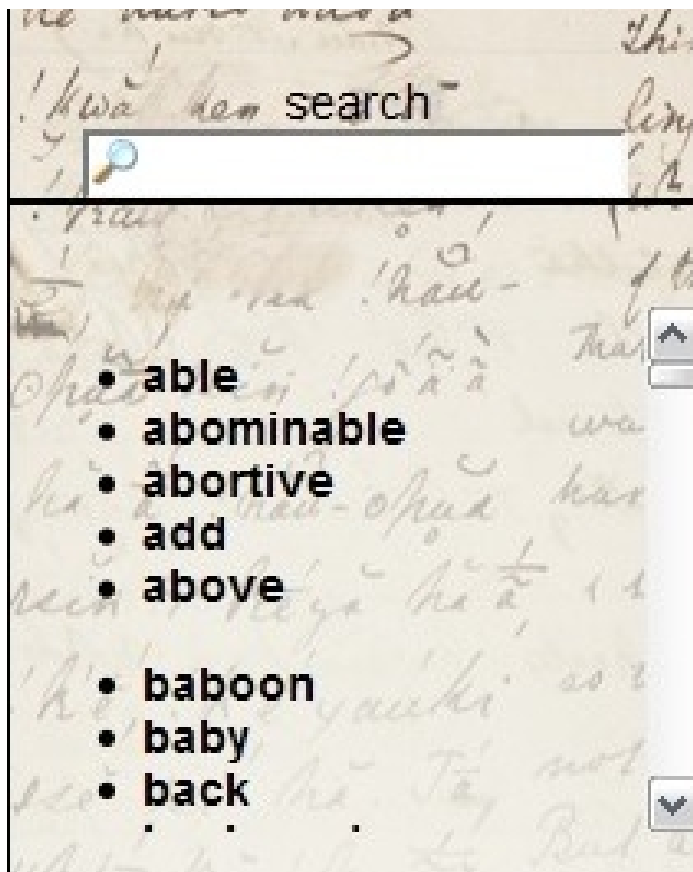


Notebooks / Story Index / Prayer to a star

Notebooks / Story Index / How the Ichneumon discovered
what the Mantis did with the honey (a second 'right')



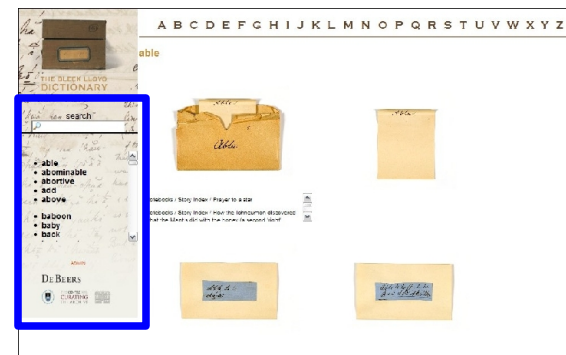
Features: Search



N

N

w



Evaluation

- Usability-based test.
- 22 respondents:
 - Some CS students.
 - Some non-CS students.
 - Some digital archivists.
- Users were asked to perform retrieval/navigation tasks.
- Users answered pre- and post- surveys.



Evaluation - Results

- In general, users were satisfied with usability of the system.
- Most positive result:
 - searching for a single word.
- Least positive result:
 - searching for multiple words.





Evaluation - Serendipity

- ▣ Finding links to the Lloyd and Bleek notebook collection.
- ▣ New words were discovered and learnt.
- ▣ The complexity of the !xam language script compared to English was interesting for users.
- ▣ Different forms of the searched term were discovered by users and led to further investigation and interest.



Conclusions

- + AJAX Interface usability
- + Dictionary without OCR
- ? Fedora

- + Lots of possibilities for future work
- “to BOLDly go...”
 - *Star Trek*
 - *[for the grammar police: “To go BOLDly ...”]*



questions?

*search for "hussein suleman"
on Google or Facebook*

