

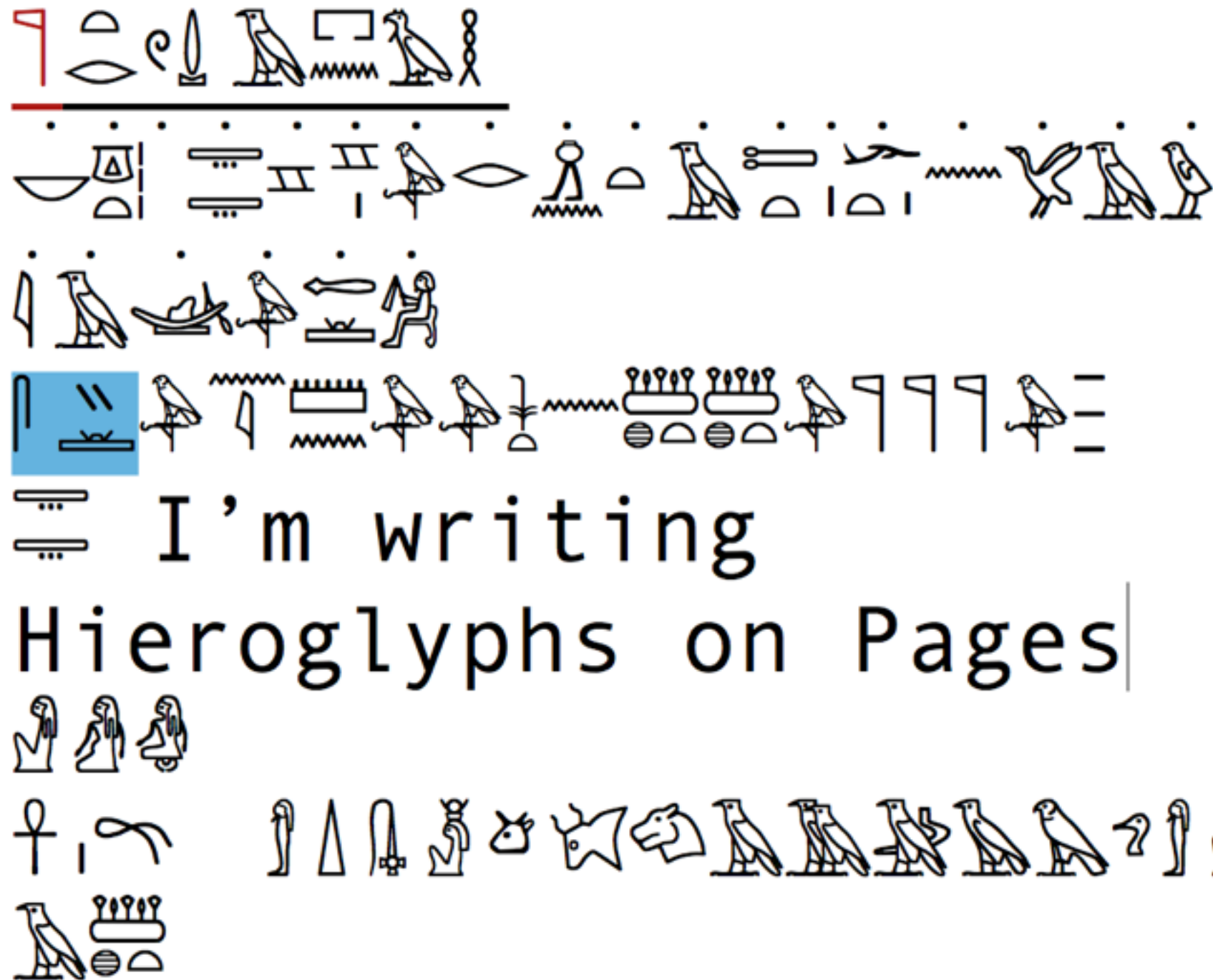
# **Egyptian Hieroglyphic Unicode Input with Square Writing: a success of the SINUHE project**

So Miyagawa (Göttingen/Kyoto)  
Marwan Kilani (Oxford)  
David Chapman (Sydney)



Image: Jeff Dahl (CC BY-SA 4.0)





I'm writing  
Hieroglyphs on Pages

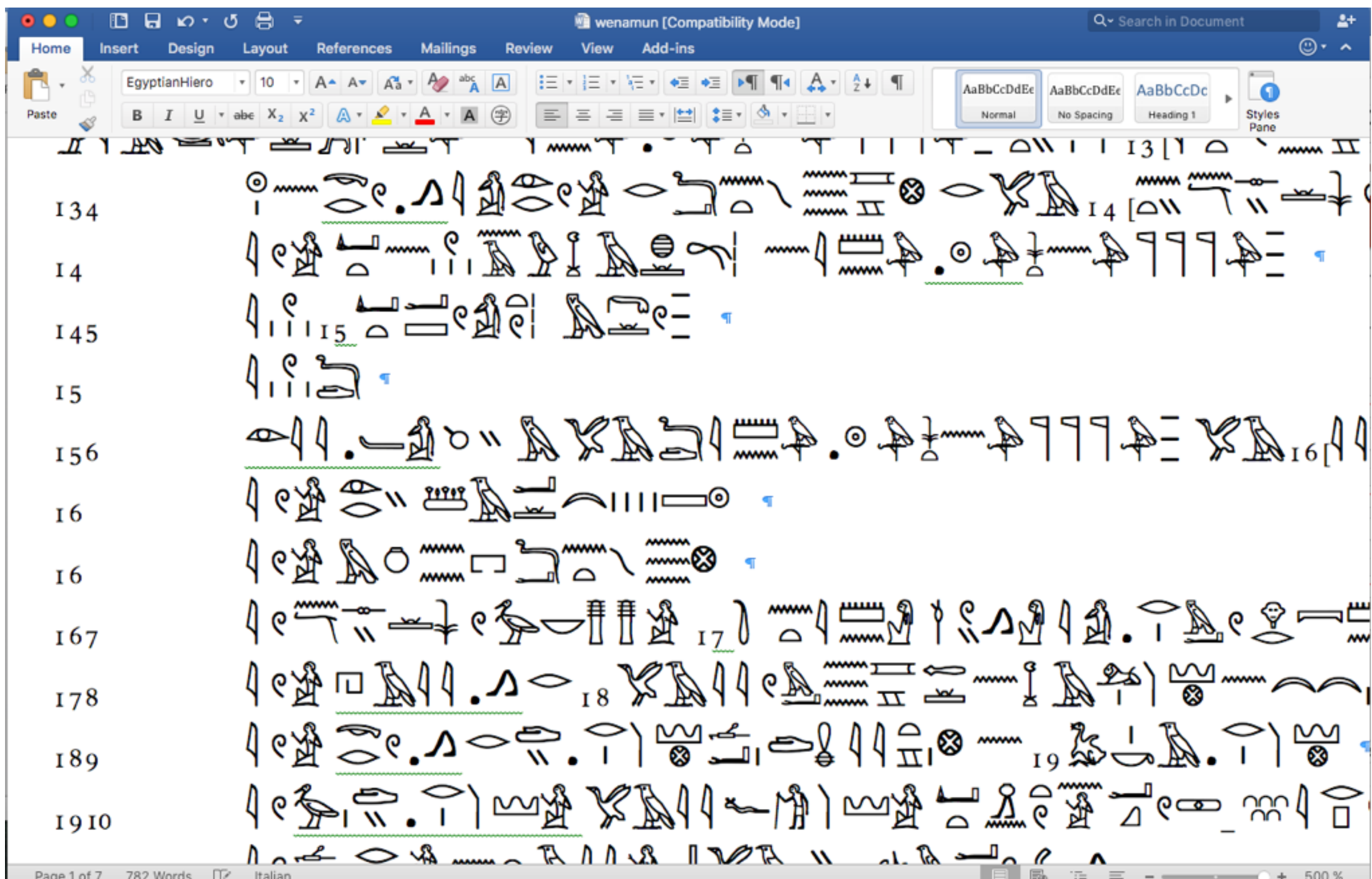


New URL: <http://somiyaagawa.github.io/SINUHE-the-Hierotyper/>

<http://sinuhe.foreverhost.us/>



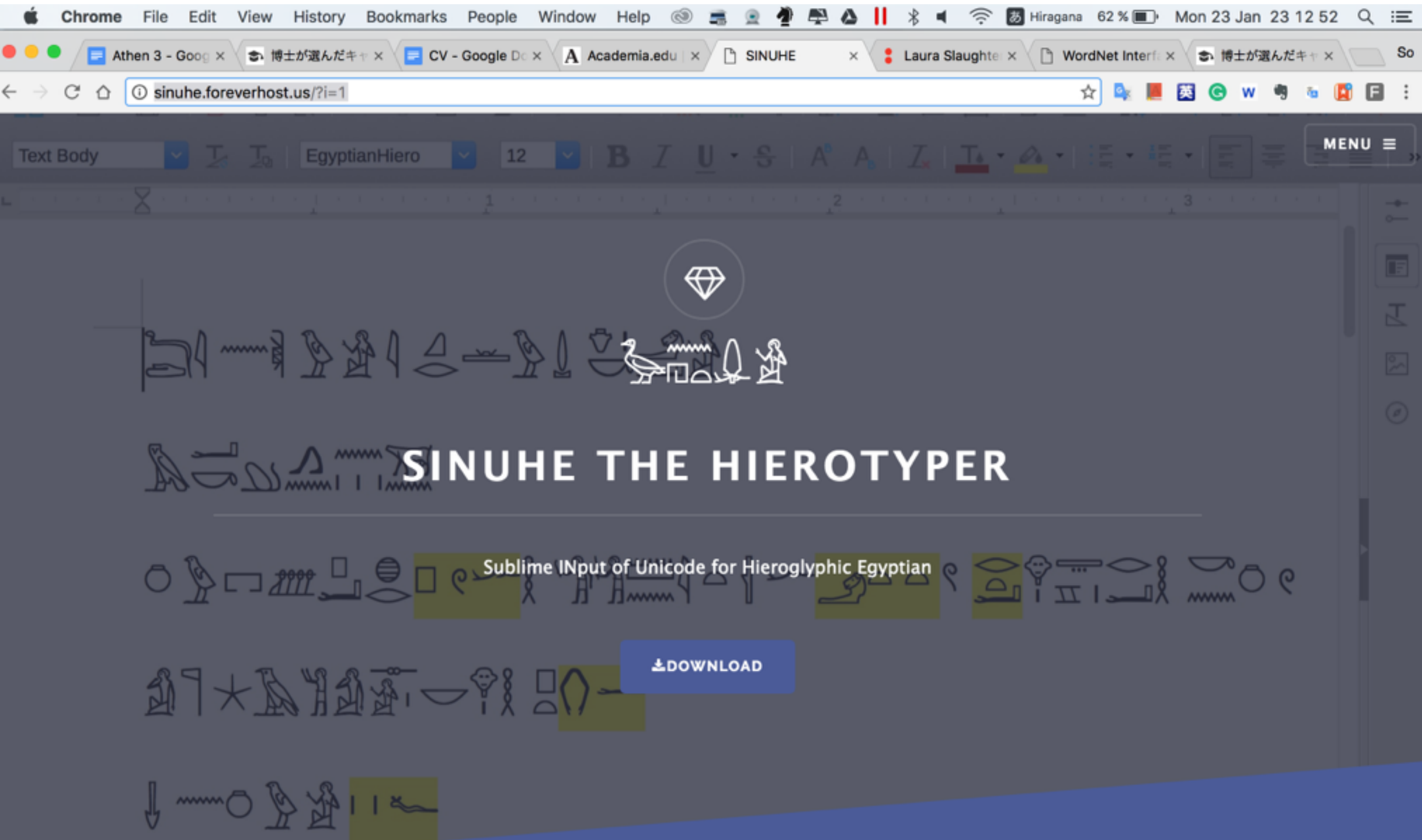
# Microsoft Word





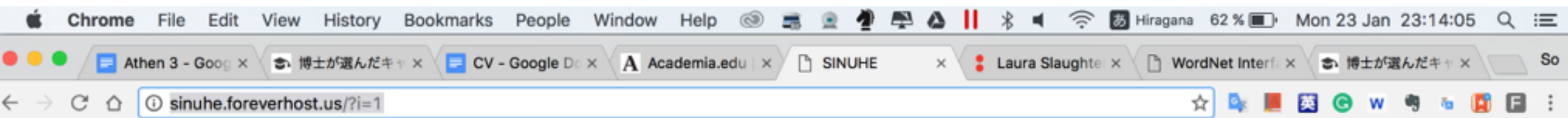
# Our homepage:

<http://somiyaagawa.github.io/SINUHE-the-Hierotyper/>



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SINUHE

MENU

## FASTER AND EASIER. FOUR WAYS OF INPUTTING.

1. transliteration of a word including phonetic complements and the

determinative: snb = 

2. category like MAN, GOD, MAMMAL...: MAMMAL =



3. transliteration of phonograms: nfr + f + r = 

4. Gardiner's code: A1 + B1 + Z2 = 



# what is SINUHE?

- Sublime INput of Unicode for Hieroglyphic Egyptian
- New Easy Fast Ubiquitous system to type Egyptian Hieroglyphic Unicode everywhere on a computer
- Unicode ligature font by Marwan Kilani
- Unicode input system by So Miyagawa



# why using Unicode?

- Nowadays, Unicode is used everywhere
- People are writing it and reading it on the computers.
- Also, it enables complex writing systems such as Chinese, Hindi, Tibetan, Ge'ez, Japanese, Korean, Arabic, and so on.



# How different from the existing software?

- Existing software uses **IMAGE FILES**
- You cannot type it DIRECTLY
- You cannot SEARCH it
- You cannot use modern CORPUS LINGUISTIC tools





# And if you use Unicode

- You can type it **DIRECTLY** everywhere
- You can SEARCH it even with Google
- You can use MODERN CORPUS LINGUISTIC tools
- Coptic Example with Voyant Tools



# Unicode is so perfect?

- The hieroglyphic unicode was established recently (2007) by Michael Everson and Bob Richmond
- We're working on it via mailing list
- The glyphs are still very basic (Gardiner)
- But, many proposals made recently.



# History

- Gardiner (approved)
- Ptolemaic (under examination)
- Hieratic special (in progress)



# Hieroglyphic Unicode Conference



@Fitzwilliams Museum, Cambridge  
Photo: Simon Schweizer



# Technology of SINUHE

- Input system (HieroJIS) <— Japanese

😏 カミラー・ディ・ビアーゼ・ダイソン教授 😏

- Font (EgyptianHiero) <— Korean & Hindi

카밀라 디 바세 다이손

k<sup>h</sup>a mi la di bya se da 'i son

教授

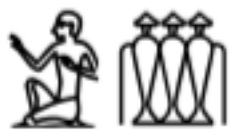









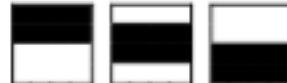




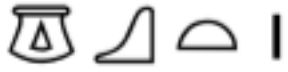


teach give

Prof.





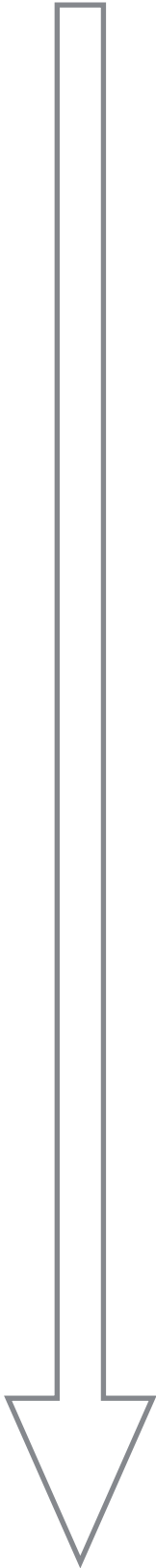
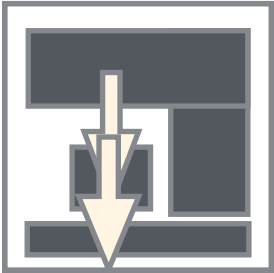
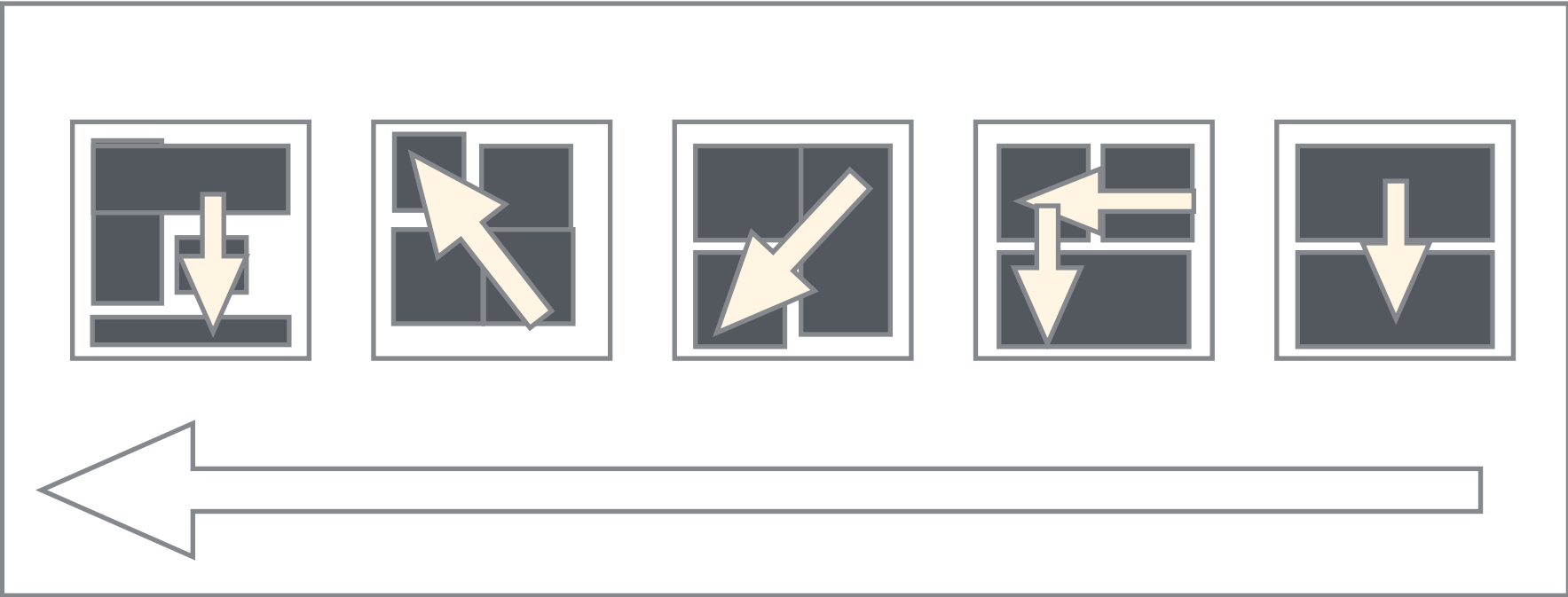
# graphemes in a box

		Standardgröße	Auf ca. 2/3 verkleinert
a)			
b)			
c)			
d)			
e)			
f)			



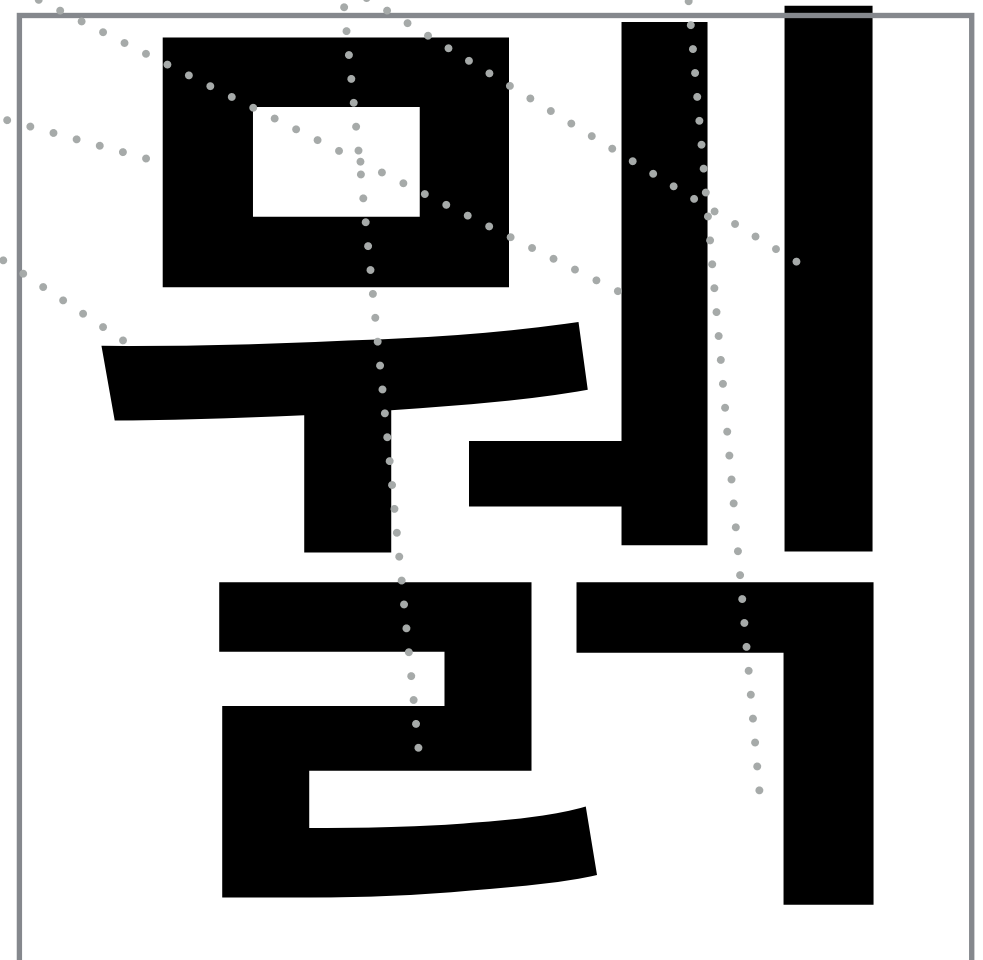
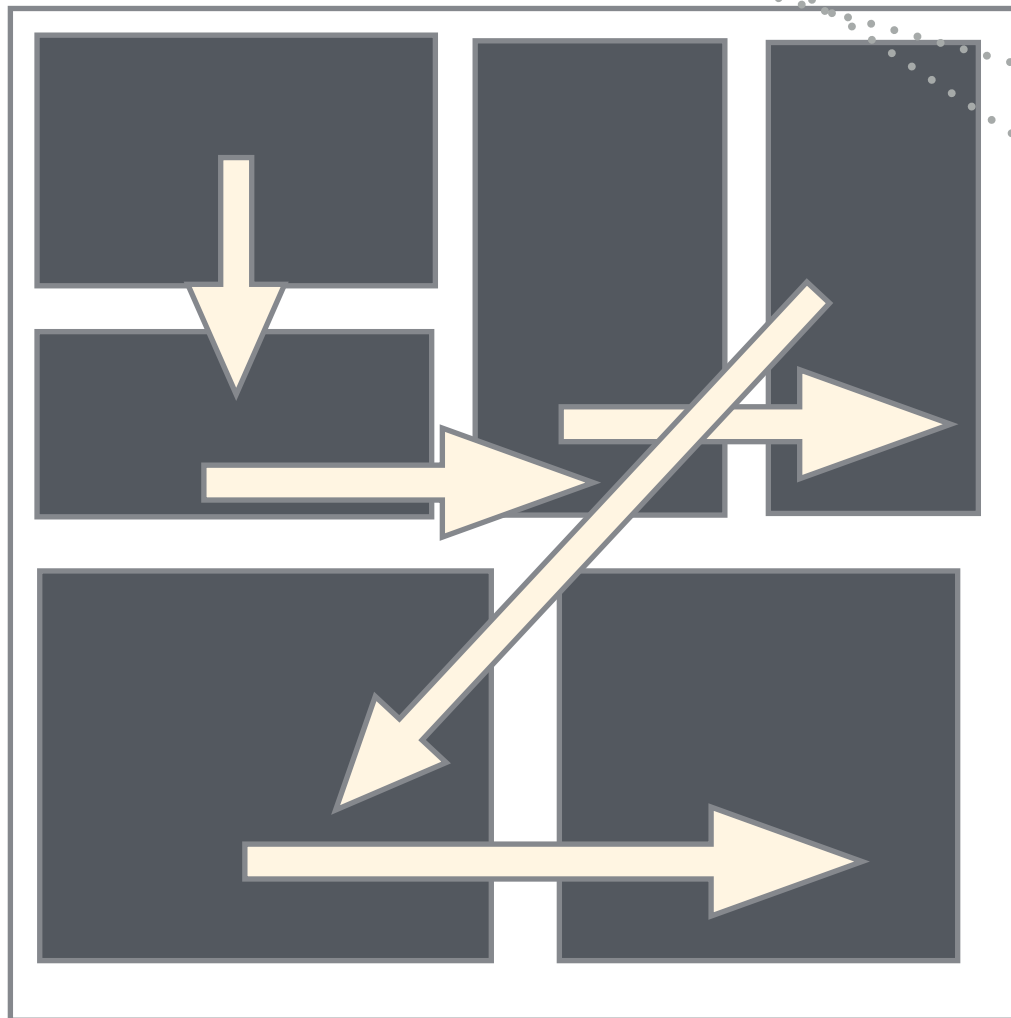
Werning, Daniel (2015), *Propädeutikum Hieroglyphisch-ägyptische Schrift und Sprache Einführung mit Zeichenlernlektionen und Übungshinweisen*. p.5.

# Egyptian

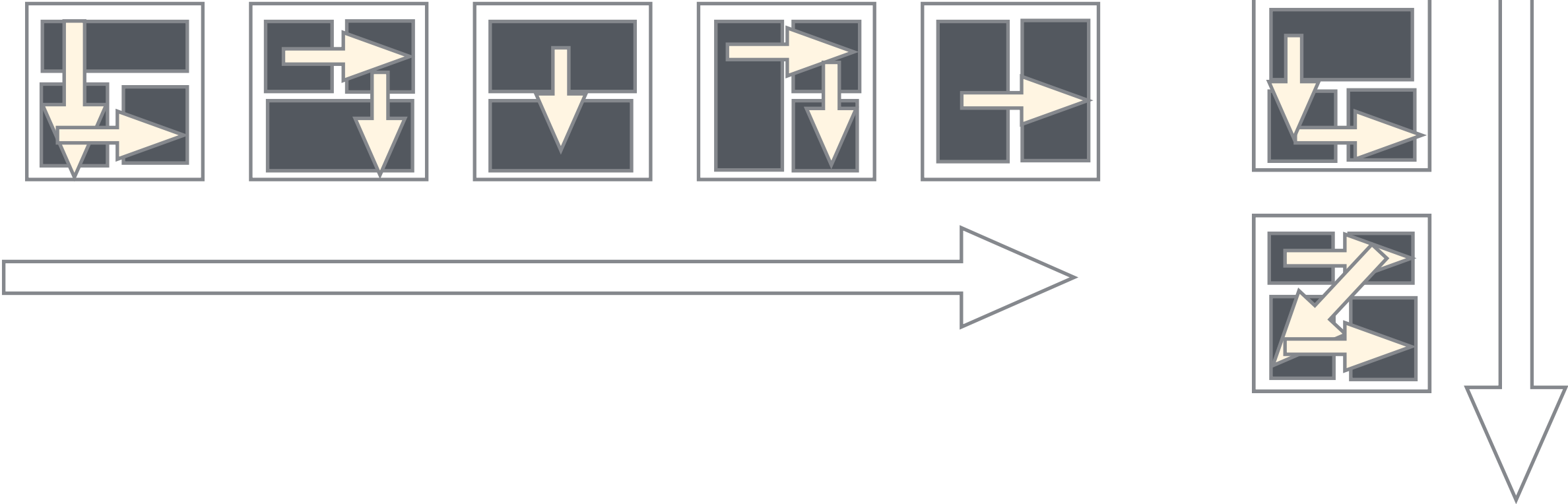


# Korean **뭉클** /mwelg/ ( /muɔilg/ )

□ /m/   ㅌ /u/   ㅊ /ɔ/   ㅣ /i/   ㄹ /l/   ㄱ /g/

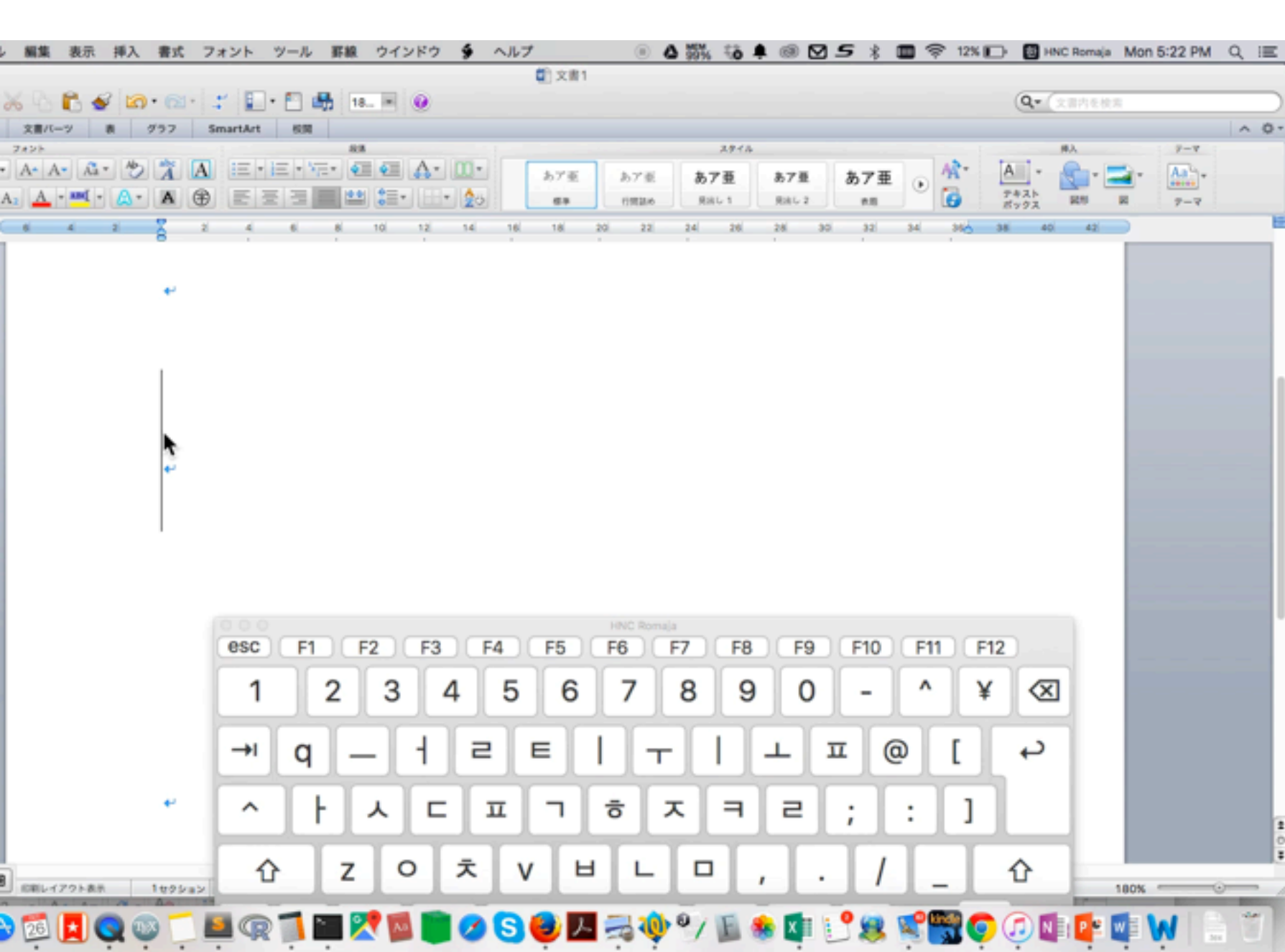


# CJK (Korean)



# Korean

- The position of glyphs





# Japanese: flexibility

- This system is used by many people (100 million)
- Phonogram (Roman alphabet, Hiragana & Katakana syllabaries)
- Logogram (Chinese characters)
- Ideograms (some of Chinese characters)
- Semagram (emoji)



# Japanese: flexibility

October 30, 2015, 8:25 PM

ファウストは悪魔メフィス  
トフェレス👿とLeipzigの酒  
場に行った。



# Demo Videos

- - Editing hieroglyphs on Pages with underlines and colours (<https://www.youtube.com/watch?v=RmBgn9W5LtM&feature=share>)
- - Inputting Hieroglyphs in square writing on Excel (<https://www.youtube.com/watch?v=qokqLzGGD7Y>)
- - Demo video of inputting hieroglyphs in a quadrat on Pages (<https://www.youtube.com/watch?v=Zx0A3A7K-dQ&feature=youtu.be>)
- - Demo video of web font displayed on Chrome and searching Hieroglyphs on Google (<https://www.youtube.com/watch?v=dEaCiduB2OA&feature=youtu.be>)



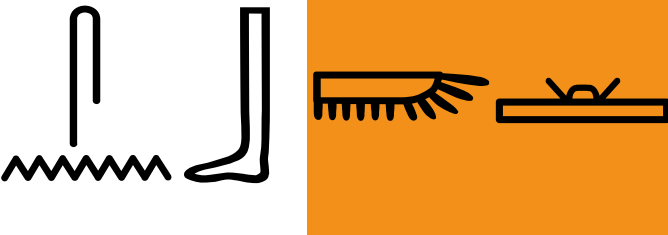
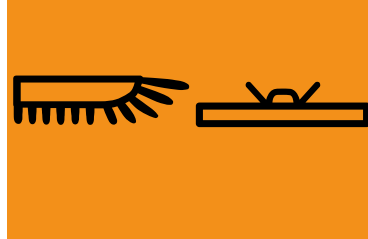
# Four Ways of Inputting

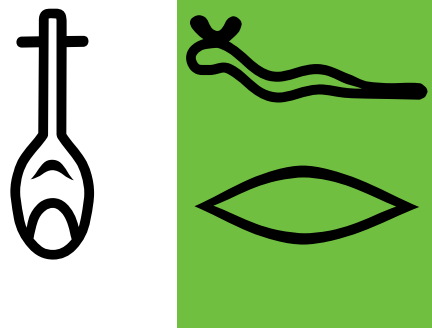
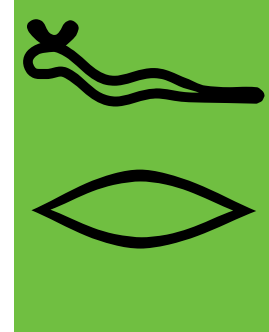
- A word in transliteration to a word in hieroglyphs including determinatives and phonetic complements (Japanese way)
- Categories such as MAN, GOD, MAMMAL... (Japanese emojis)
- Gardiner's cord (existing)
- Transliteration of phonograms (existing)



# Transliteration to Whole Word

- It includes determinatives and complements

- snb =  

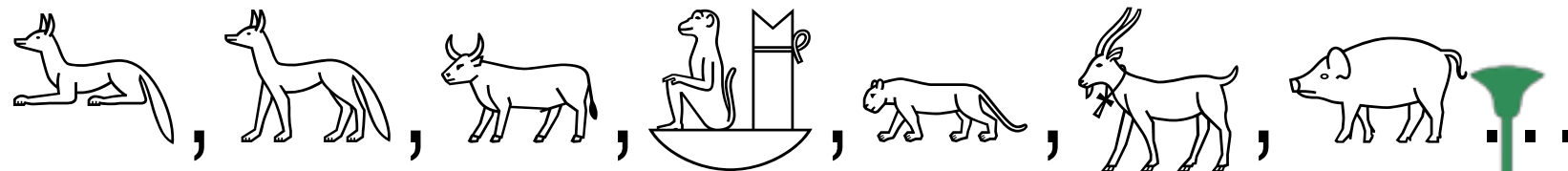
- nfr =  








# Categorical Input

- Categories like MAN, GOD, MAMMAL...
- MAMMAL =



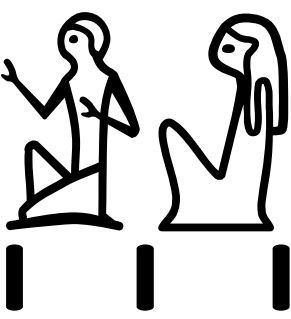
# Phonograms (mnemonic)

- transliteration of phonograms:

- $nfr + f + r =$    



# Gardiner's code

- $A1 + B1 + Z2 =$  



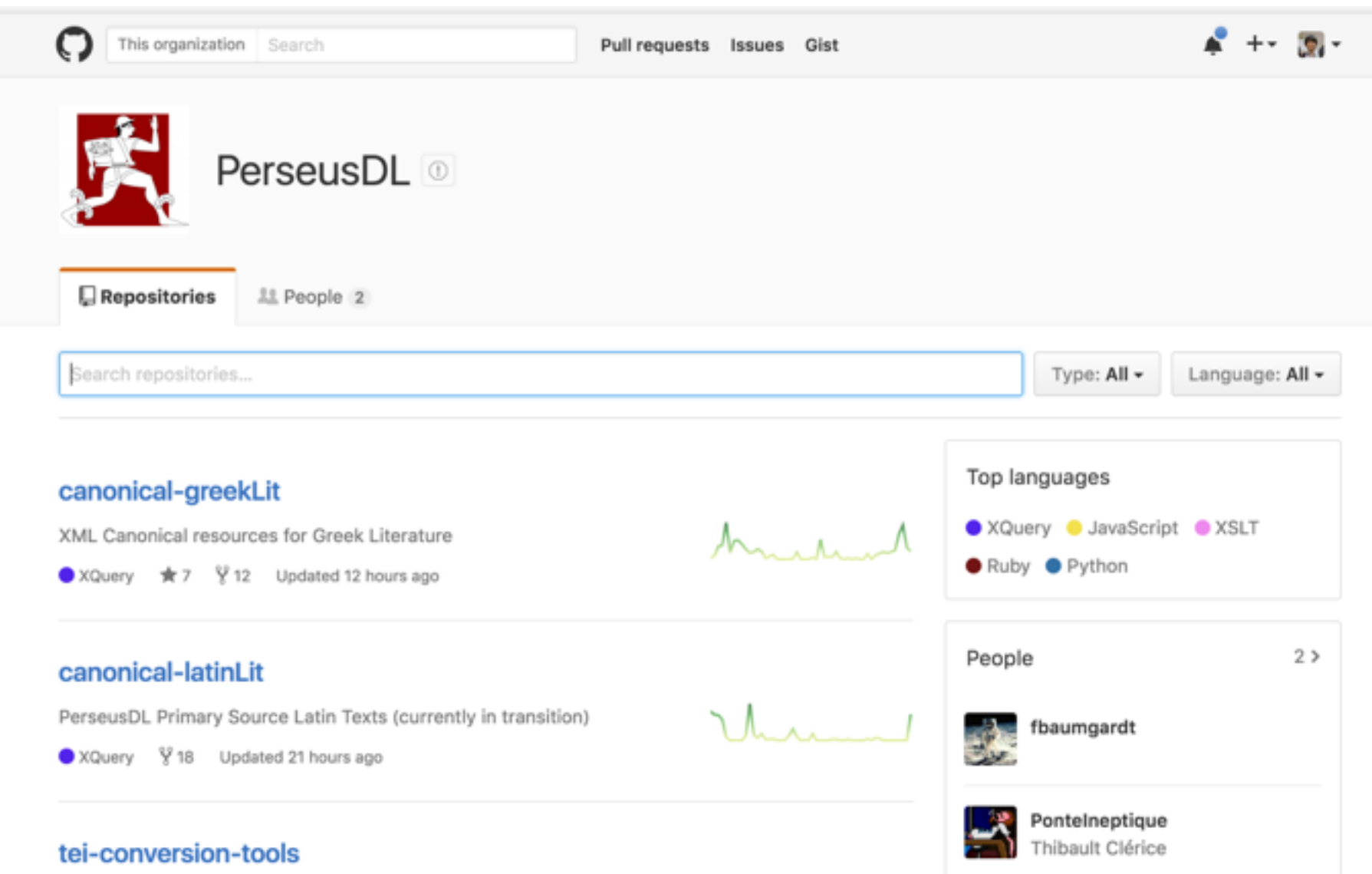
# Web Font

- Also, it has a web font.
- It enables you to make a web corpus.
- <http://somyagawa.github.io/SINUHE-the-Hierotyper/>



# Share your contributions

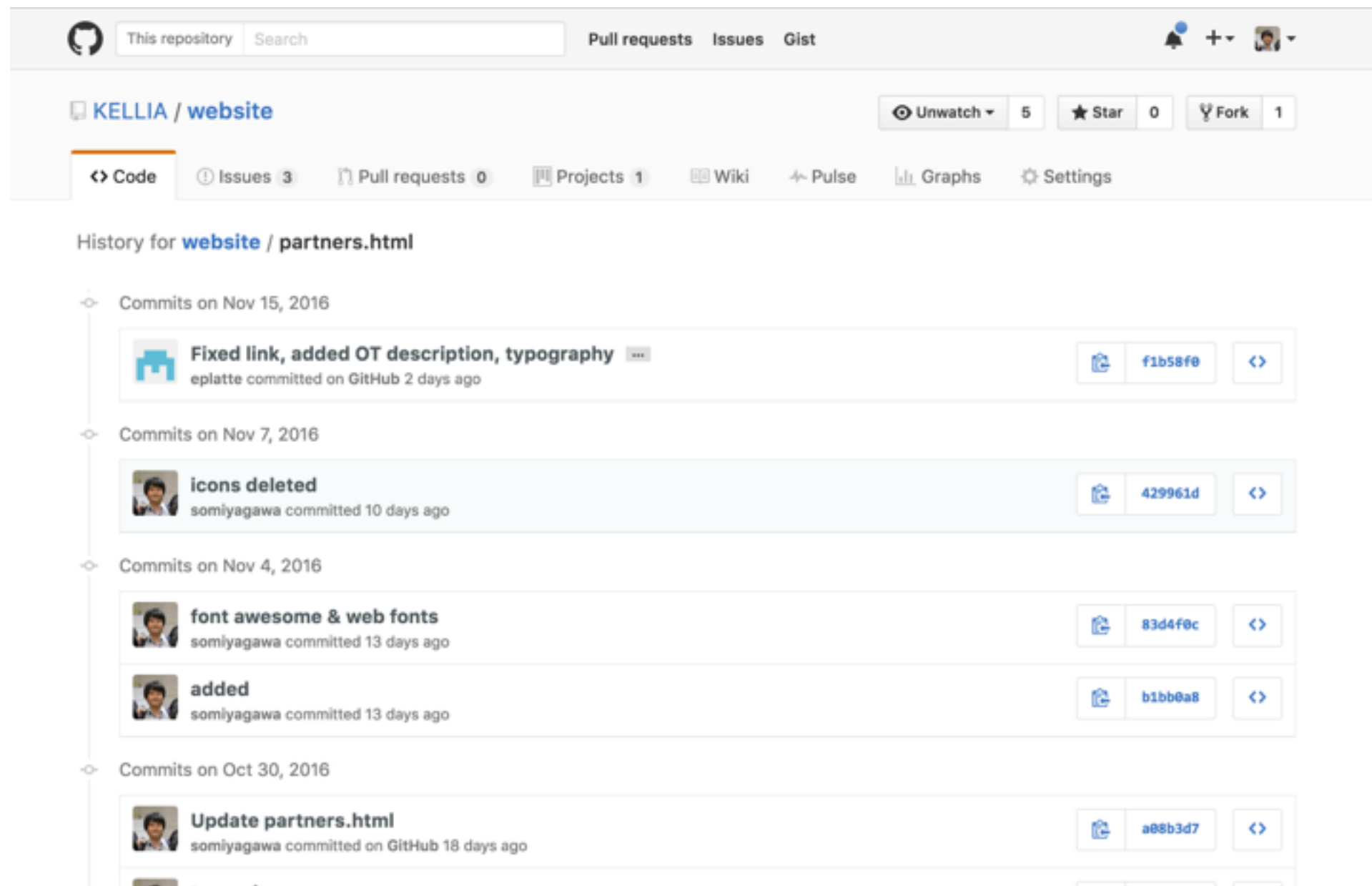
- GitHub— Version Management Platform





# Share your contributions

- GitHub



# Share your contributions

- GitHub

0  Icon 

View

No changes.

57  about.html 

View

		@@ -71,71 +71,72 @@
71	71	
72	72	
73	73	
74	-	<h1><i class="fa fa-question-circle" aria-hidden="true"></i> ABOUT KELLIA</h1>
	74	+ <h1> ABOUT KELLIA</h1>
75	75	
76	76	<p>
77	77	KELLIA (the Koptische/Coptic Electronic Language and Literature International Alliance) will promote interdisciplinary
78	78	<hr>
79	-	<h2><i class="fa fa-user-circle" aria-hidden="true"></i> Project Directors</h2>
80	-	<ul>
	79	+ <h2> Project Directors</h2>
	80	+ <ul> <li><a href="https://www.uni-goettingen.de/en/472658.html">Heike Behlmer</a><a href="https://github.com/hbehlme
81	81	<li><a href="http://www.carrieschroeder.com/">Caroline T. Schroeder</a><a href="https://github.com/cts Schroeder"
82	-	<li><a href="https://www.uni-goettingen.de/en/472658.html">Heike Behlmer</a><a href="https://github.com/hbehlme
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83	83	
84	84	</ul>
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86	-	<h2><i class="fa fa-users" aria-hidden="true"></i> Participants</h2>
	86	+ <h2> Participants</h2>
87	87	<hr>
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	88	+ <h3> Coptic SCRIPTORIUM</h3>



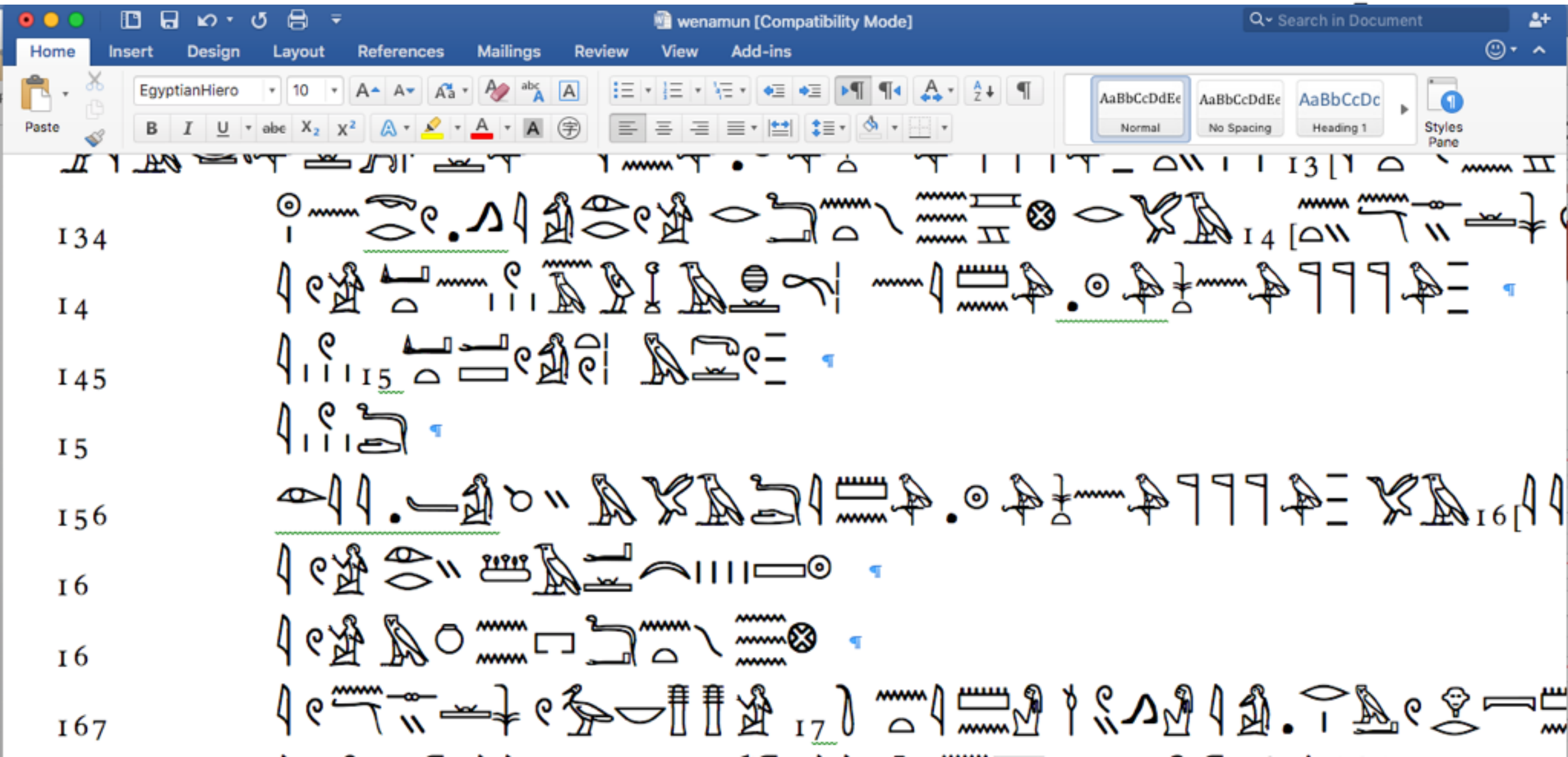
# Exercises

**Type Wenamun!**



# Exercises

## Type Wenamun!



# Easy Exercises

Type some words

*nfr nr wd3 sdm snb*

*wsr 3st inpw dhwt*

*rmt wnm sw etc.*





# Easy Exercises

## Type some Categories

MAN, WOMAN, GOD

MAMMAL, PLANT

REPTILE, MANBODY etc.



# ADD new Ligature

- Lecture by Marwan Kilani after this talk



# Thanks!

[smiyaga@gwdg.de](mailto:smiyaga@gwdg.de)  
[runa.uei@gmail.com](mailto:runa.uei@gmail.com)

Visit

<http://somyagawa.github.io/SINUHE-the-Hierotyper/>

