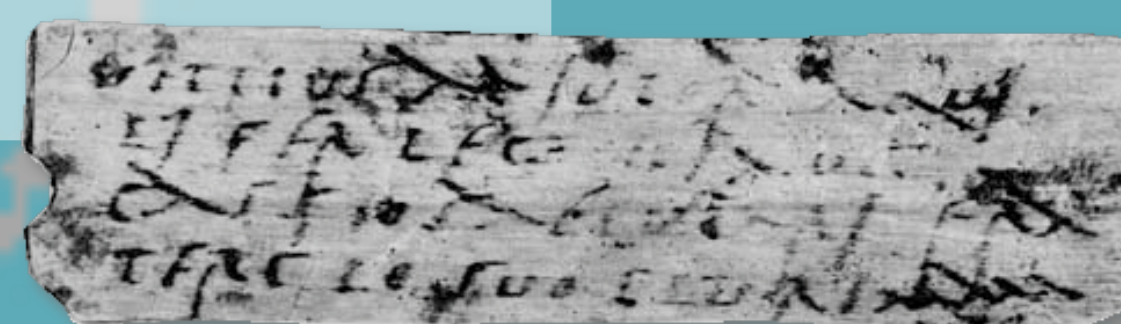


## Aims

The Interpretation Support System (ISS) focuses on supporting the reader of ancient documents through the interpretation process by doing the jobs that humans find difficult.

- Remembering complicated reasoning
- Searching huge datasets
- Accessing other expert's knowledge
- Enable co-operation between experts on a single document
- Format and output their interpretation for publication

Vindolanda Tablet  
214 using the  
word "legionaris"



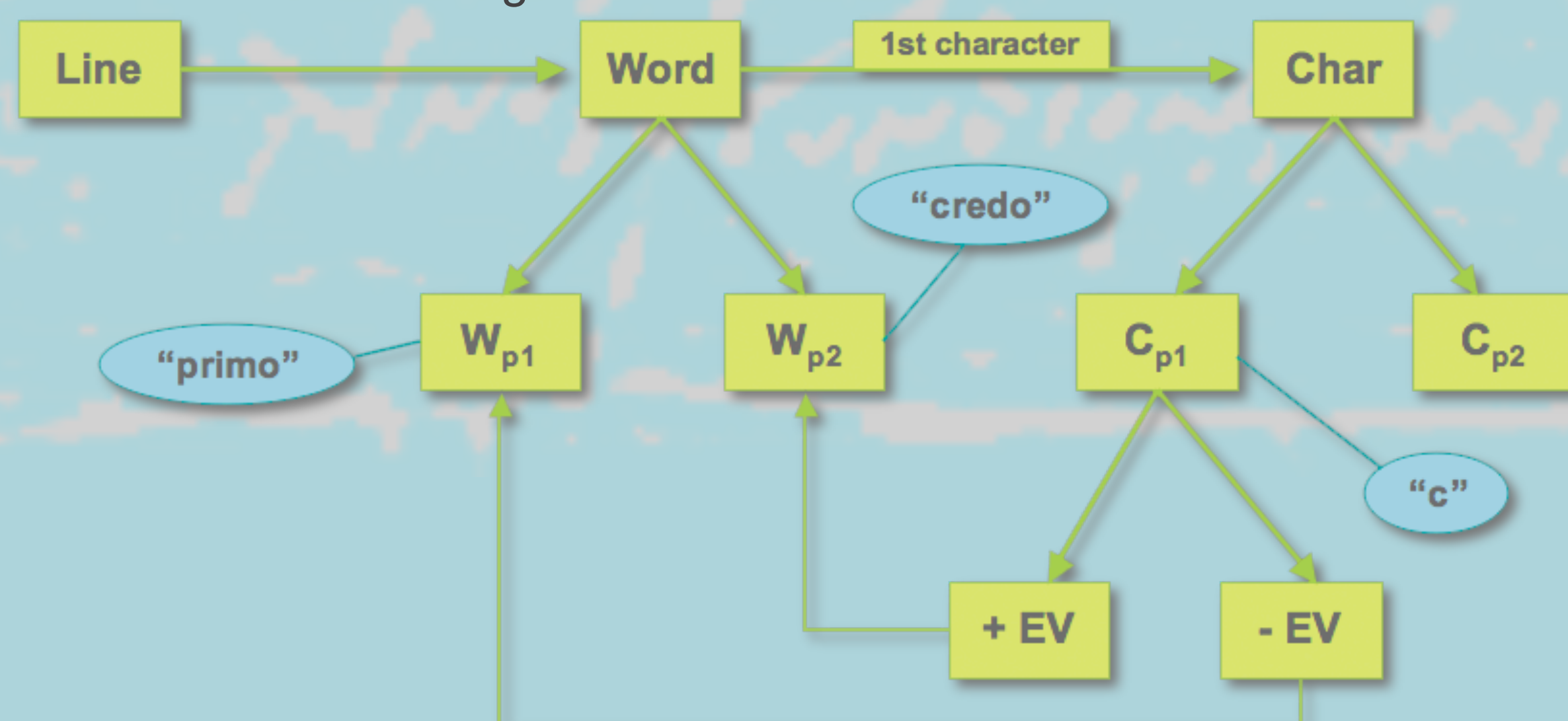
## Network of Percepts

The interpretation process is pictured as a network of minor interpretations, which we call percepts.

- Low level: "these three line fragments are an incised stroke"
- Higher level: "these five letters can make up the word 'legio'"

## Evidence based

Model of ISS concepts showing how the interpretation of a word can be evidence for and against a character.



## Prototype

The ISS prototype is using XML to build different views.  
At the moment the ongoing interpretation is also stored as XML.

```
<lb n="1">
  <w id="1">
    <cb id="1" n="t">t</cb>
    <cb id="2" n="u">u</cb>
    <cb id="3" n="r">r</cb>
    <cb id="4" n="m">m</cb>
    <cb id="5"/>
  </w>
  <gap reason="lost" extent="unknown" dim="right"/>
</lb>
```

EDITION

LINE 1: turm.[

LINE 2: hordiar[

LINE 3: .x.l.as

LINE 4: exe.[

LINE 5: penes[tur[

LINE 1: t u r m . +C +WORD

LINE 2: h o r d i a r +C +WORD

LINE 3: . x . l . a s +C +WORD

LINE 4: e x e . +C +WORD

LINE 5: p e n e s +C t u r +C +WORD

+LINE

### CURRENT INTERPRETATIONS

Character: h  
Change character: ☐

+ Word: hordiaria

+ AKB: h, 'Because I say so'

+ Word search: hordiaria, hordiator(es)

- Character recognition: n, r

### CURRENT INTERPRETATIONS

Character: n  
Change character: ☐

+ Character recognition: n, r

- Word: hordiaria

- AKB: h, 'Because I say so'

- Word search: hordiaria, hordiator(es)

### CURRENT INTERPRETATIONS

Character: t  
Change character: ☐

- Word: hordiaria

- AKB: h, 'Because I say so'

- Word search: hordiaria, hordiator(es)

- Character recognition: n, r

The evidence for and against the character changes as the character changes.  
This allows the expert to reason under uncertainty because it makes the uncertainty clear.  
However, it is always the experts choice, regardless of the evidence for and against a character.

## Future work

- Incorporate an annotation tool to allow defining of the characters, words and lines directly via the image of the document.
- Find a suitable storage facility for the ongoing interpretations.
- Build the ISS as a portable web application.

Vindolanda Tablet  
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