# Welcome, Pompeii Archaeologists!



# The problem: unclassified graffiti few vulgar Latin readers poor translation software



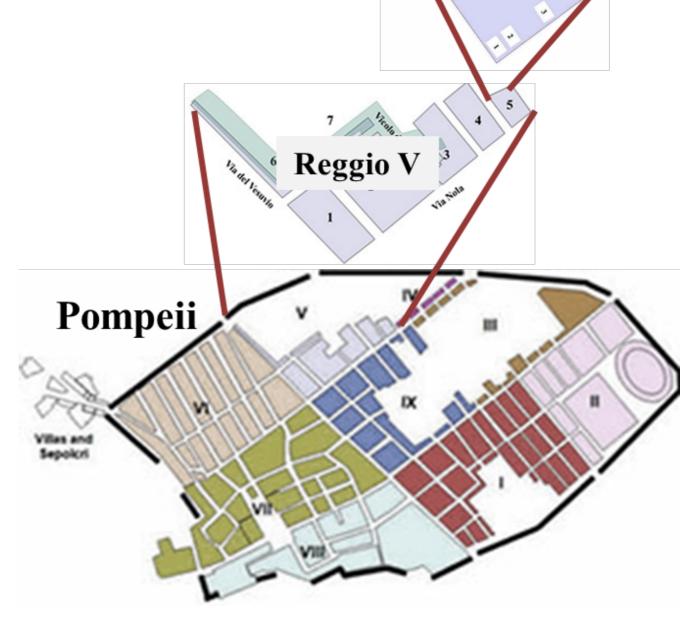
Why is Google Translate so bad for Latin? A longish answer.

Why Latin Google Translate is so bad.

Google Translate for Latin is completely statistical. **It has no model of grammar, synt**ation correlate sequences of up to five consecutive words in texts that have been manually transpared.

What if we use location data to classify graffiti?





House of the

Gladiators

## Site context



**Inhabitants** 

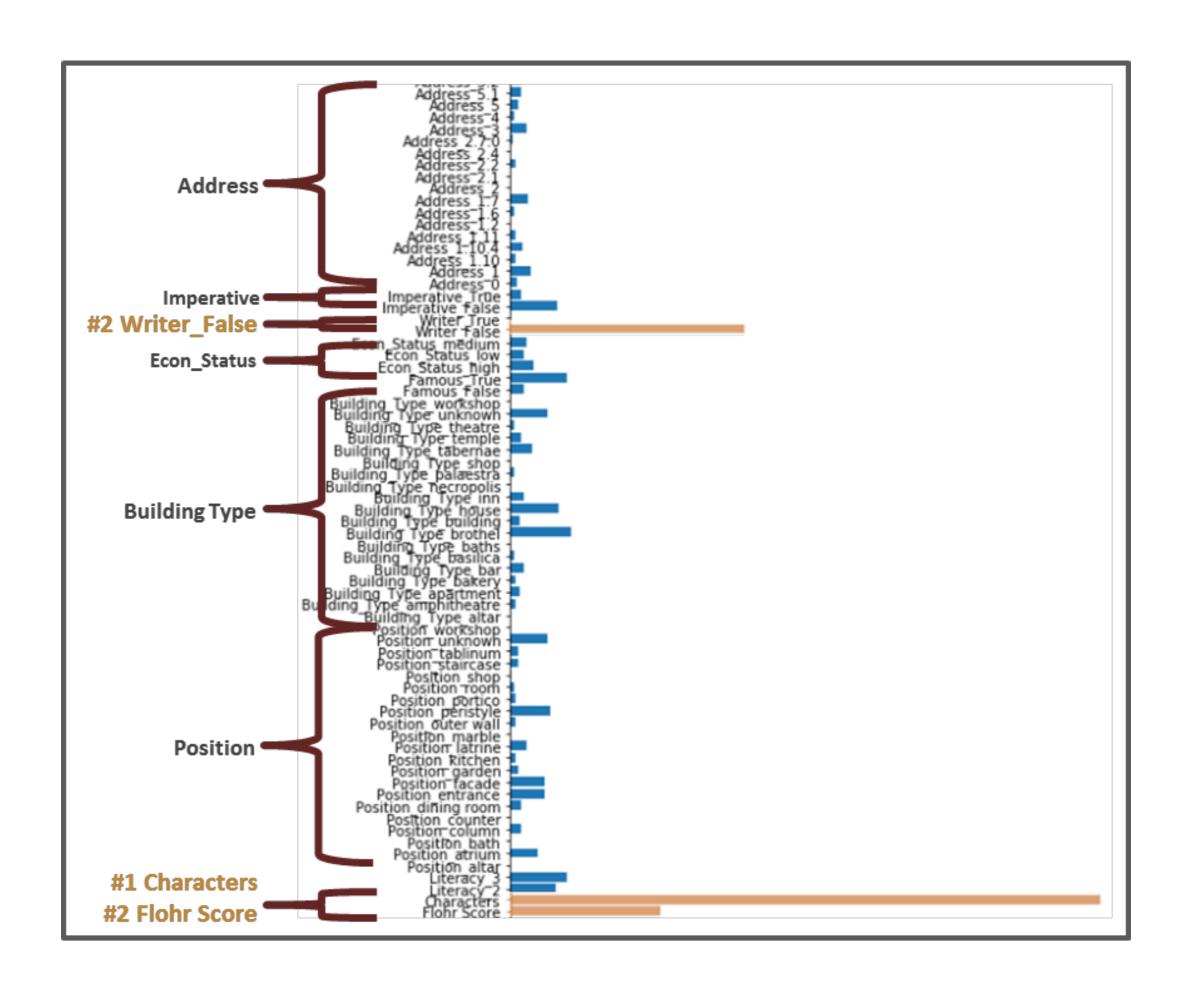


## The result:

45% chance of classifying a graffito. (Correct less than half the time.)

Random guessing:

14% chance of classifying a graffito.



# Recommendations:

Use people to translate text

Use models to classify text

Use classified text to enrich site context

### **Translation**

Site context

Classification

Inhabitants

**Graffiti context**