Reference databases, Research databases, and Typological databases

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NYU Workshop on the Feasibility of a Web-based Database of the Syntactic Structures of the World's Languages

What is a database?

- Reference database: A database containing data whose structure is presumed to be well understood that is used to facilitate access to information in some knowledge domain
- Research database: A database containing data whose structure is poorly understood that used to facilitate research on the nature of the knowledge domain from which the data is drawn

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- WALS, in its present form, is a reference database
- Many typological databases start out as research databases but finish as reference databases
- Autotyp is designed to be a hybrid reference/research database

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- It can be quite difficult to build a database without a stable model
- There is no "end" in terms of technological development—results prompt revisions and new needs
- Community consensus on data entry essentially impossible

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- I wouldn't say that syntactic "features" and "values" are among these

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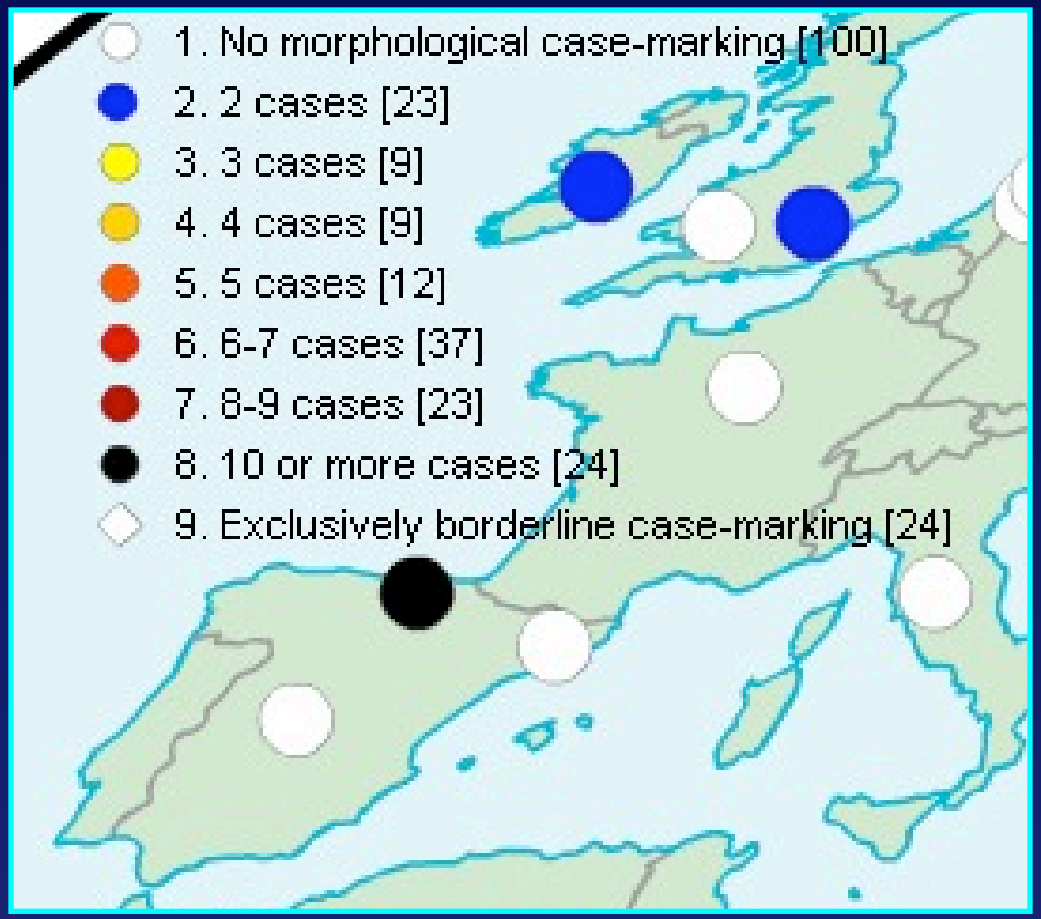
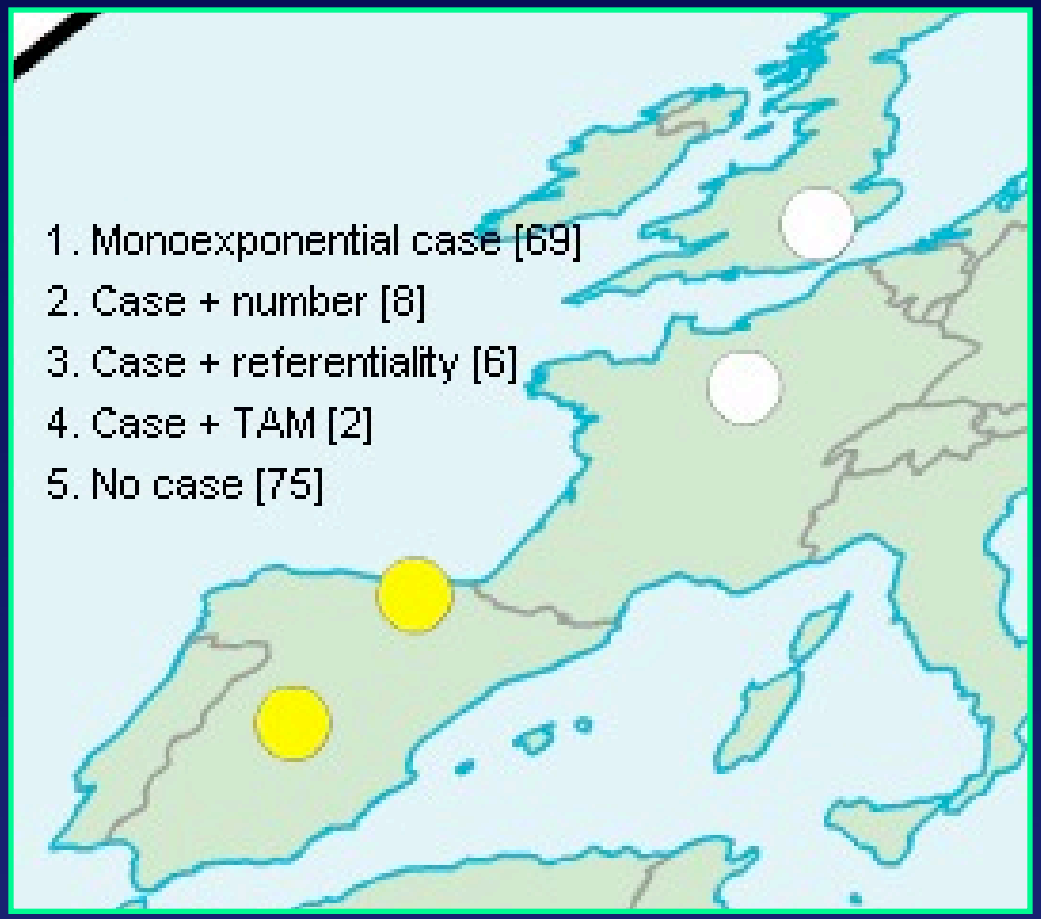
- It is not one database, but rather 141 databases using a common metadata standard
- Datapoints between databases cannot assumed to be directly comparable
- Databases are to be cited as independent works

How many cases?



"Number of Cases"
by Oliver A. Iggesen



"Exponence of Selected Grammatical Formatives"
by Balthasar Bickel and Johanna Nichols

(See also: http://email.eva.mpg.de/~cysouw/pdf/cysouwSOCIALLAYER.pdf)

How many cases?

2. 2 cases [23]

5. No case [75]

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- A possible solution: Give a clear, strict definition of *case*
- But, this is a reference solution, not a research solution
- Different definitions may be both reasonable and interesting

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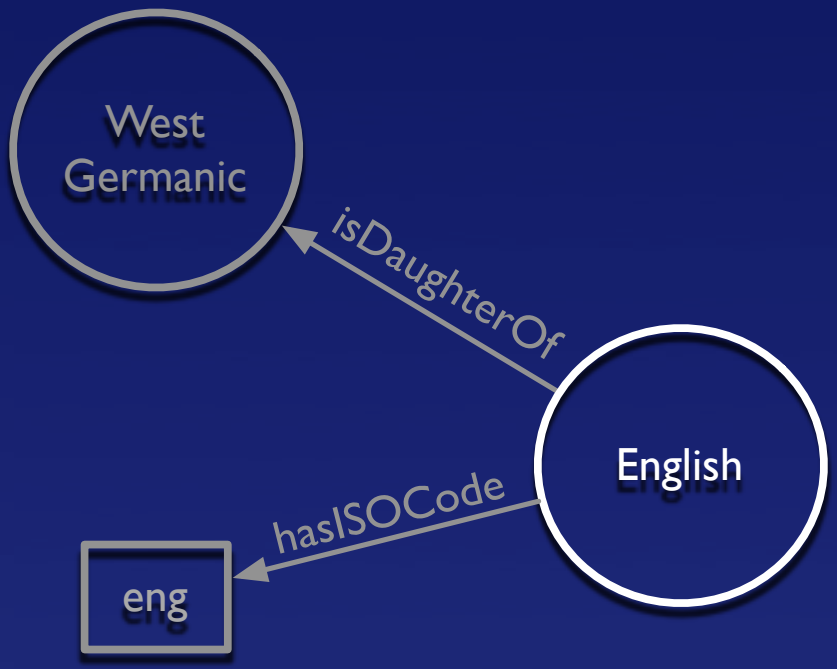
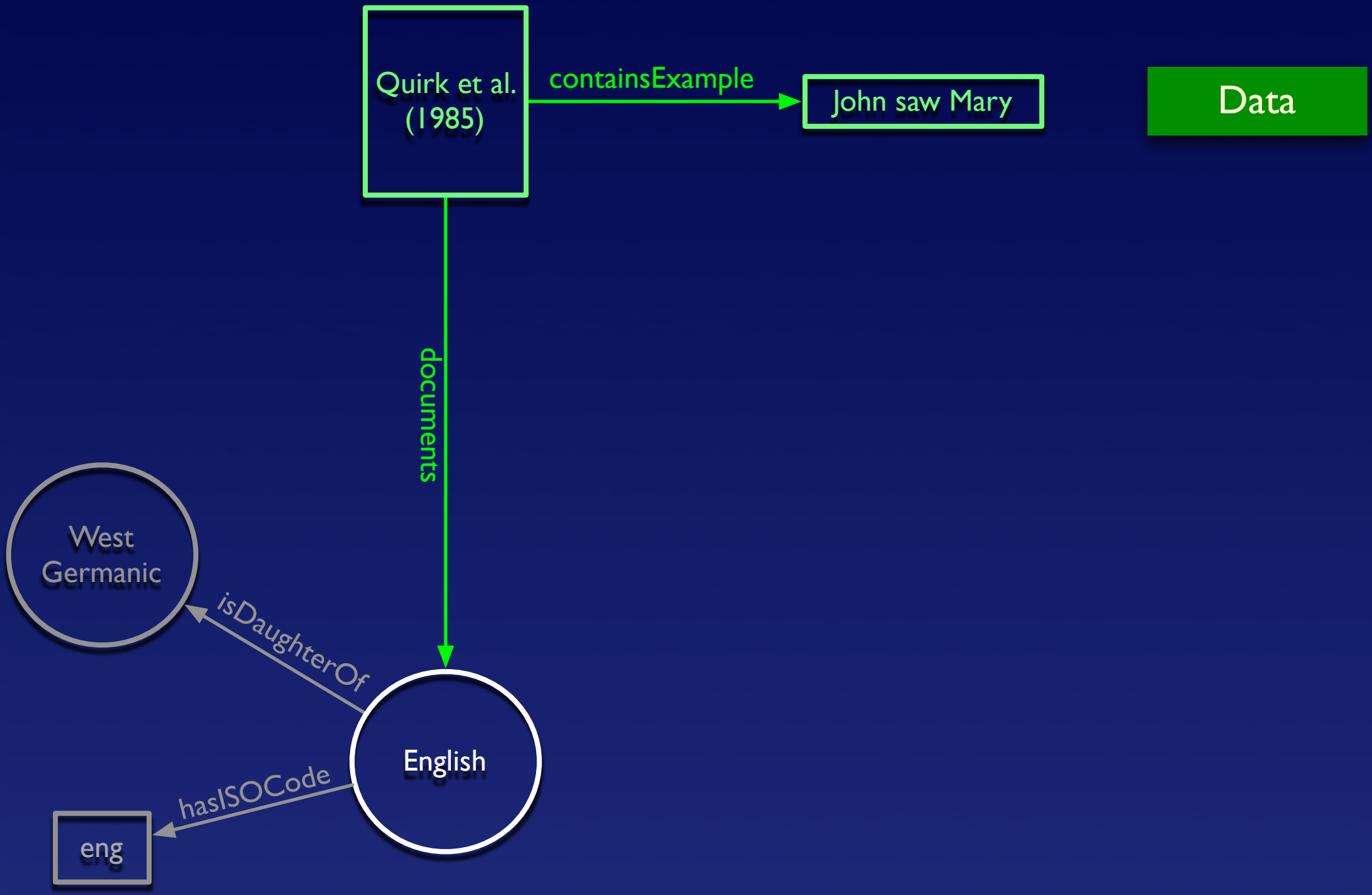
  - Independent research projects in typology
  - A reasonable level of interoperability among those research projects


West
Germanic
isDaughterOf
English
hasISOCode
eng


Quirk et al. (1985)
containsExample
John saw Mary
Data
documents
West Germanic
isDaughterOf
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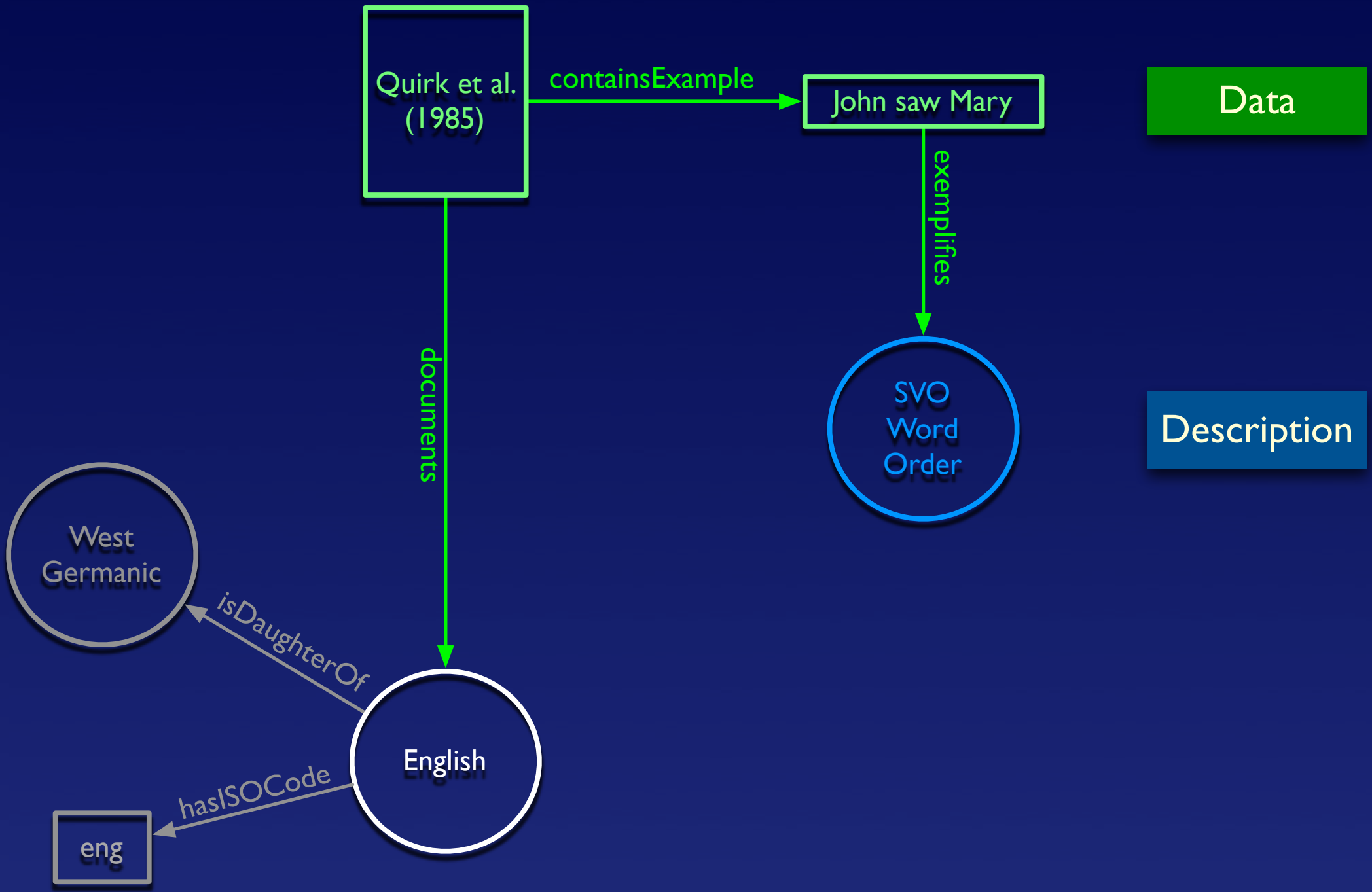
eng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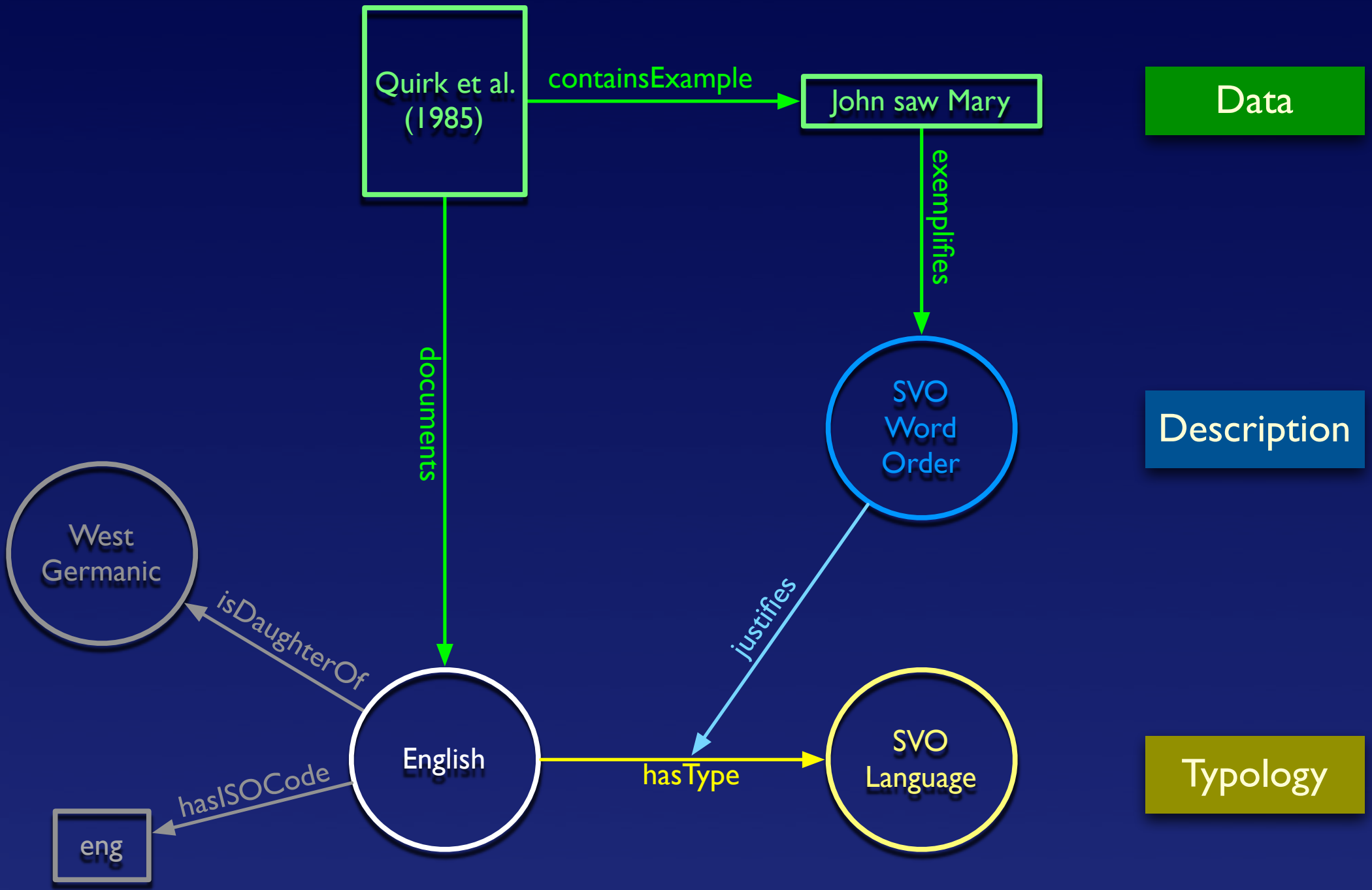
Data
Description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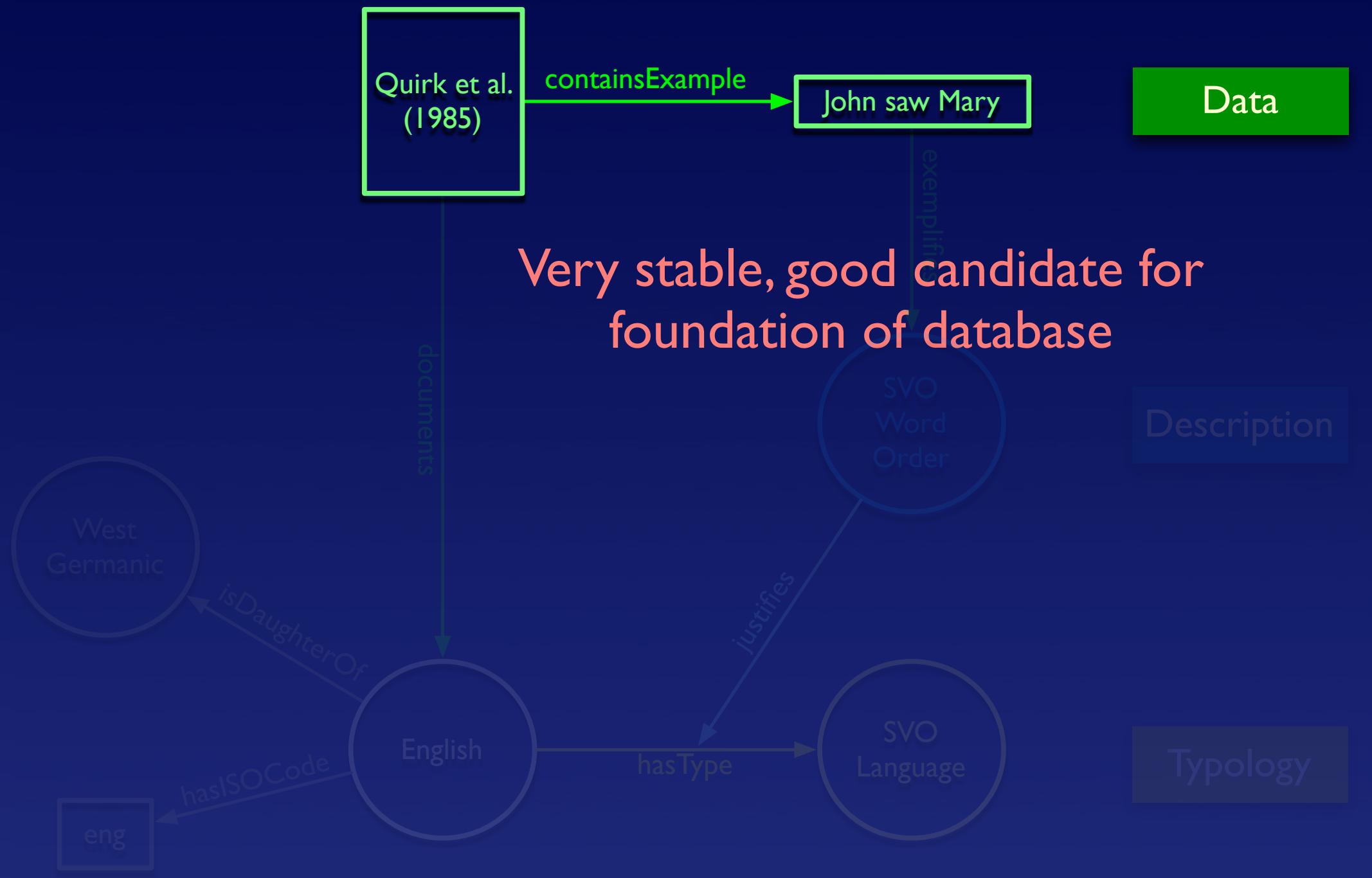
Quirk et al. (1985)
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Data
exemplifies
Very stable, good candidate for foundation of database
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Quirk et al. (1985)
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John saw Mary
exemplifies
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Less stable, but consensus probably achievable
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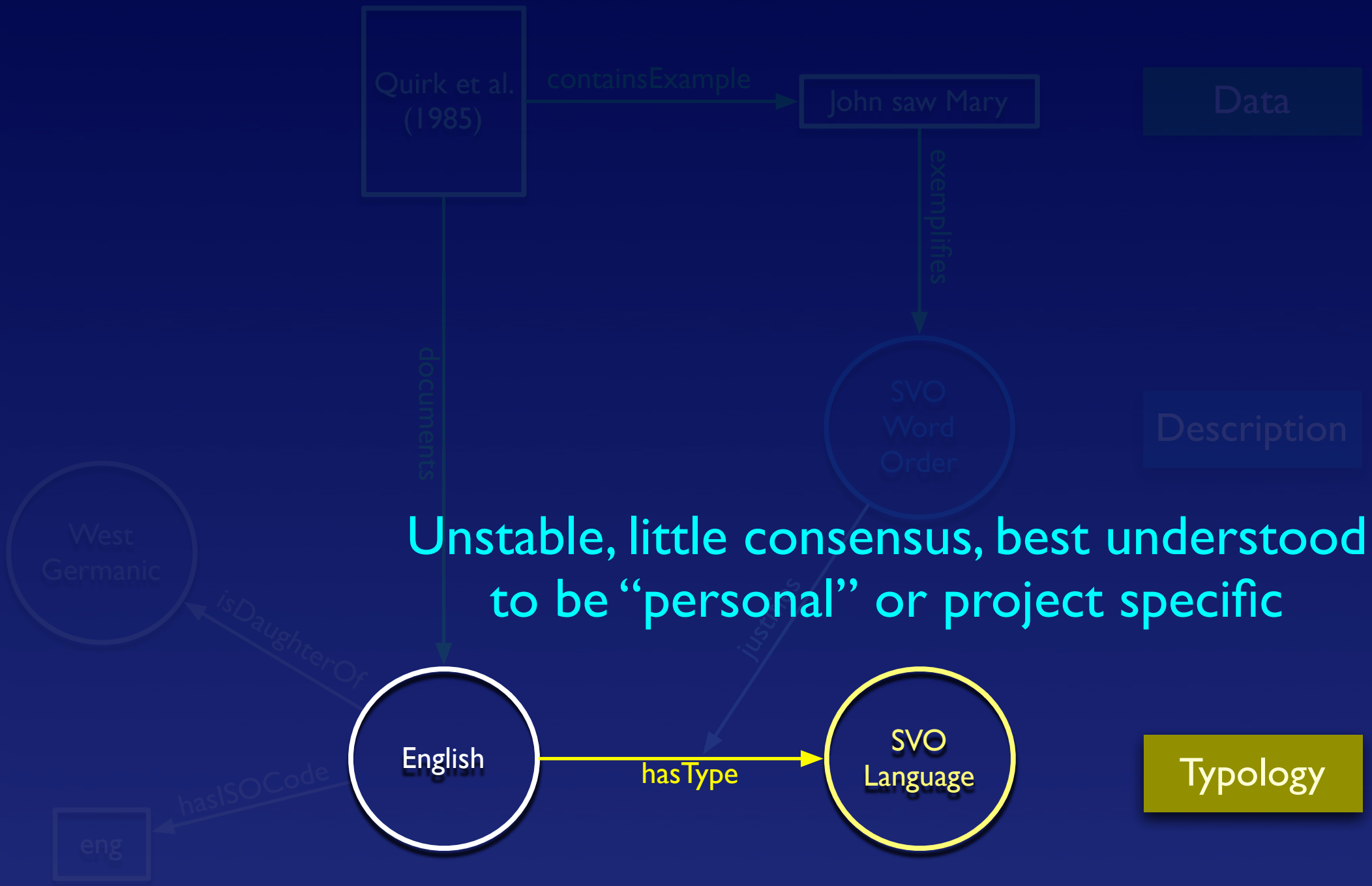
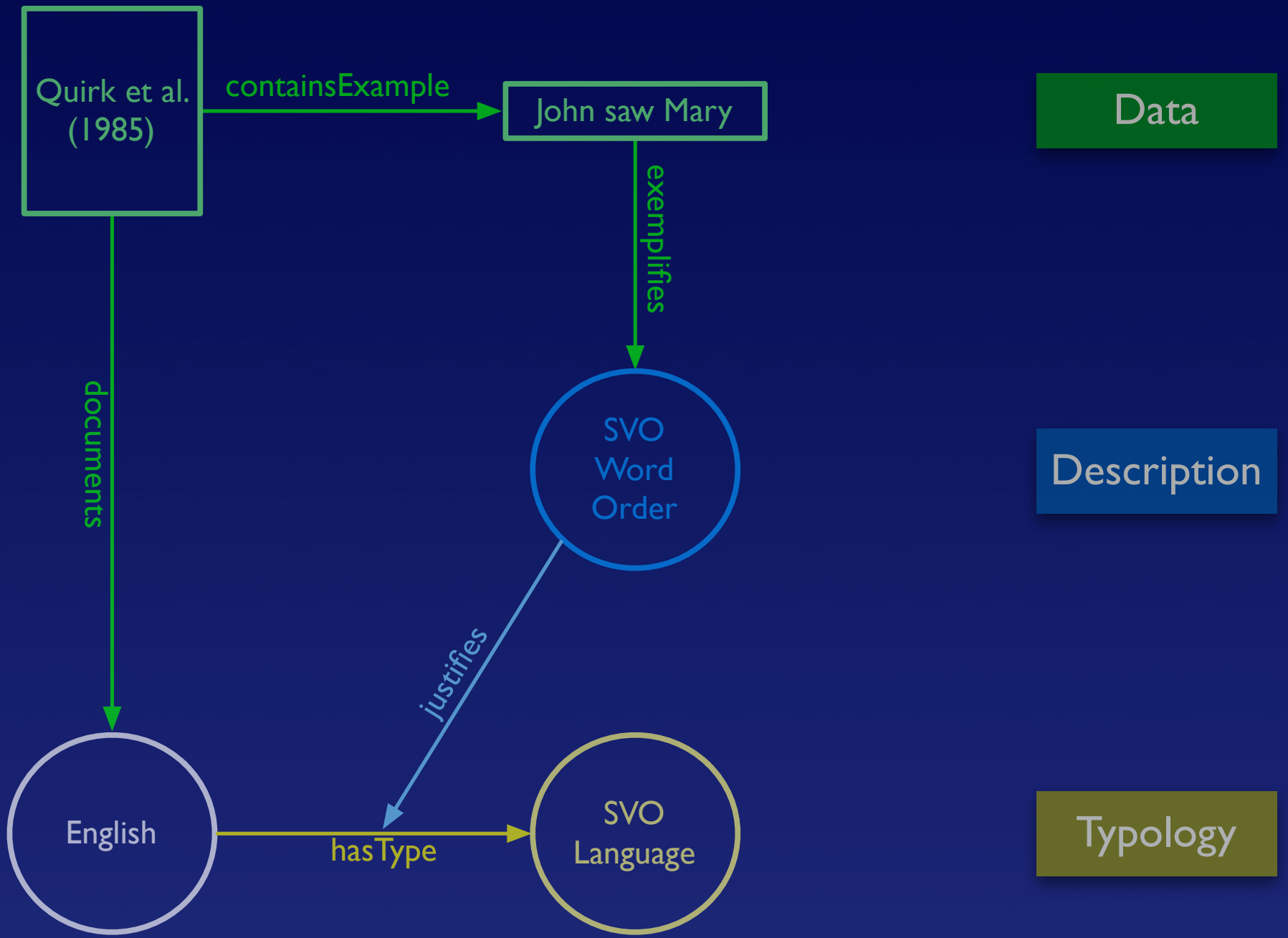


Unstable, little consensus, best understood to be "personal" or project specific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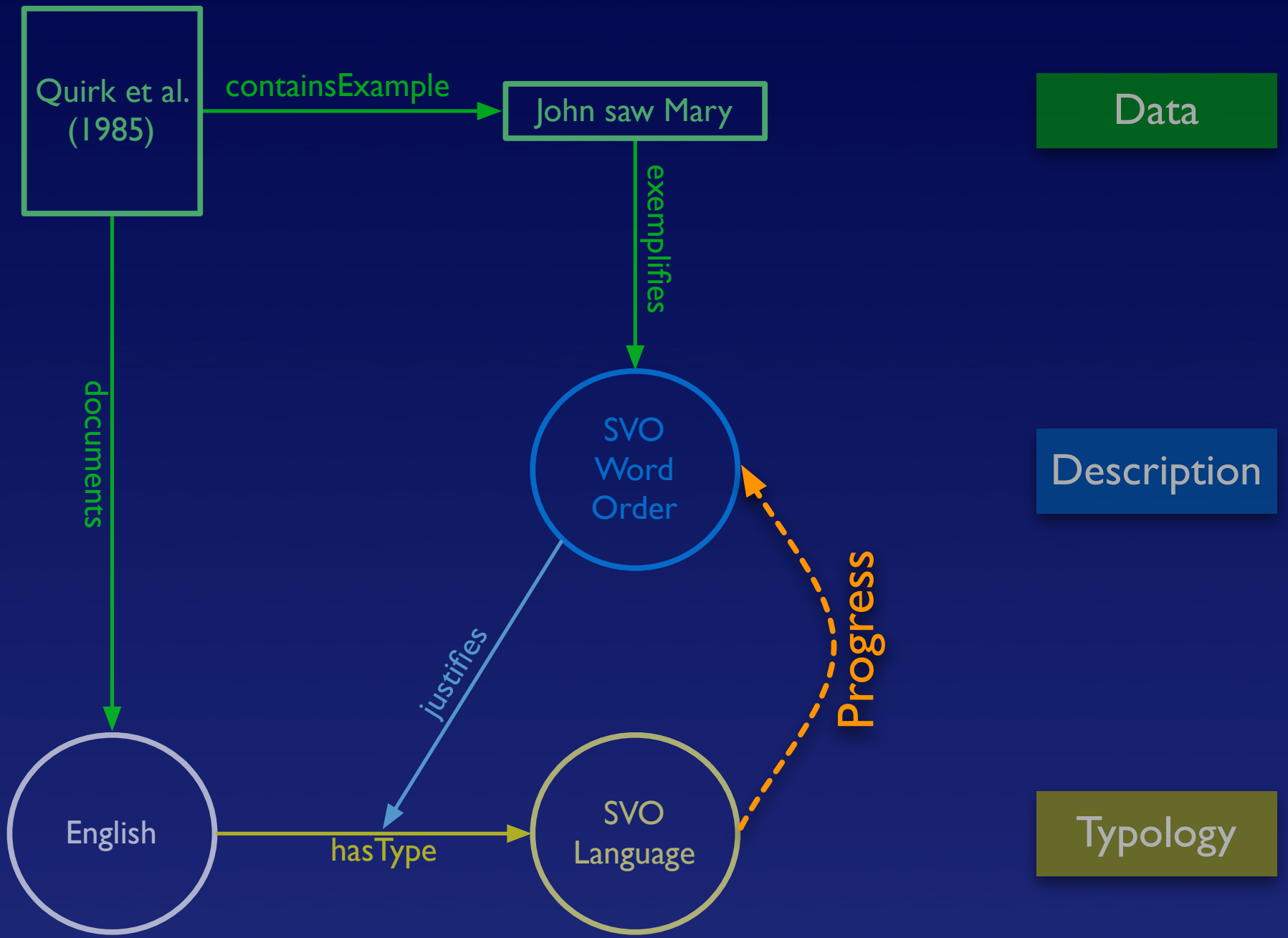
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Recommendation

- To build a typological research database
  - Attempt some level of standardization for data and description
  - Do not standardize typology
  - Provide tools for typologization based on description
- Reference databases like WALS should be built on top of such a system, not into it