

Towards standardization of metadata for L2 corpora

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Outline

- Definition and rationale
- Overview of current L2 metadata
- Standardization in neighbouring fields
- Towards standardization of learner corpus data
- Next steps
- Conclusion

Definition and rationale

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Metadata

- “Data that serve to describe other data” (Heid 2009)
- “The kind of data that is needed to describe a digital resource in sufficient detail and with sufficient accuracy for some agent to determine whether or not that digital resource is of relevance to a particular enquiry” (Burnard 2005)
- “Metadata is descriptive or contextual information which refers to or is associated with another object or resource. This usually takes the form of a structured set of elements which describe the information resource and assists in the identification, location and retrieval of it by users, while facilitating content and access management” (Higgins 2007)
- “Metadata is data about data: information describing properties of linguistic resources, for instance the size of a corpus, the recording date of a speech file, the purpose for which annotations were created.” (Frequently Asked Questions - Metadata in CLARIN: basics, <https://www.clarin.eu/faq-page/273#t273n2850>)

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Scope of metadata (Burnard, 2004)

- **Editorial metadata**
 - Information about the relationship between corpus components and their original source (e.g. addition or omission, correction, normalization)
- **Analytic metadata**
 - Information about the way in which corpus components have been interpreted and analysed (e.g. transcription, linguistic annotation)
- **Descriptive metadata**
 - Classificatory information derived from internal or external properties of the corpus components (e.g. demographic characteristics of speakers, setting, text type)
- **Administrative metadata**
 - Corpus availability, revision status, etc.

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Why are metadata important? (1/2)

- **Selection of language resources**
 - Is this dataset appropriate to answer my research questions?
- **Interoperability and reusability**
 - « Given the comparative nature of most corpus-based studies, researchers may want to use only selected parts of a corpus by creating sub-corpora, or use it in conjunction with other corpora. In order to re-use and exchange corpus resources, the adoption of common encoding standards would seem an advisable choice. » (Zanettin, 2011: 108)
- **Sustainability**
 - “Metadata is the backbone of digital curation. Without it a digital resource may be irretrievable, unidentifiable or unusable.” (Higgins, 2007)

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Why are metadata important? (2/2)

- **Explanatory variables in L2 research**
 - “The purpose of SLA theory is to better understand the nature of learner language, its development, and what impacts upon both” (Myles, 2015)
- **Replication studies**
 - “Conducting a research study again, in a way that is either identical to the original procedure or with small changes (...), to test the original findings” (Gass & Mackey 2011).
 - “The documentation helps other researchers to understand the basis of comparison, thus allowing replication of another researcher’s results. The metadata put the collected raw data information into a scientific context.” (Blume & Lust, 2017: 49)

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Timing is of the essence

- “The decision about what metadata to collect is crucial, as it is often difficult to return to participants to request further information once data collection has taken place” (Barker et al. 2015)

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Learner corpora

- “Systematic computerized collections of texts produced by language learners” (Nesselhauf, 2004).
- “Electronic collections of natural or near-natural foreign or second language learner texts assembled according to explicit design criteria” (Granger, 2017)

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Overview of current L2 metadata

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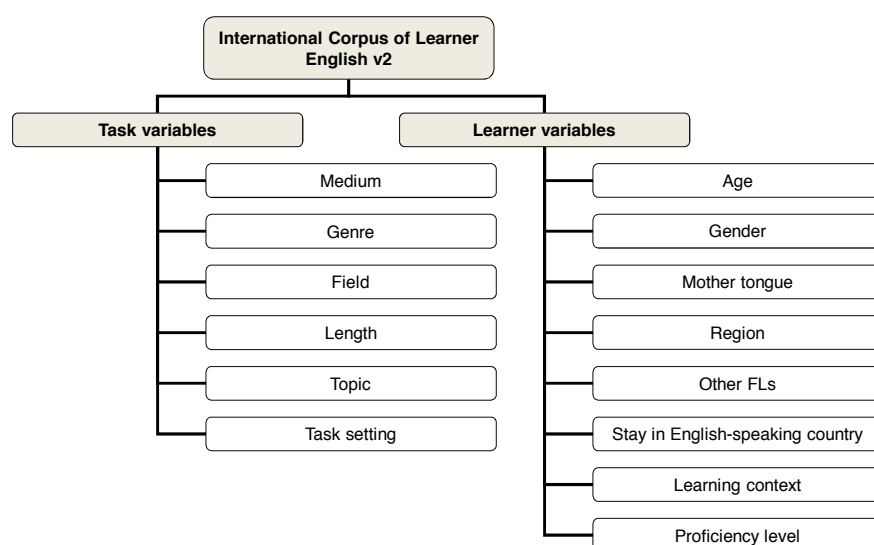
Core metadata in learner corpora

- **Learner variables**
 - Variables that characterize the learner
- **Task variables**
 - Variables that pertain to the language situation

(Granger, 1998)

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ICLE (Granger et al., 2002, 2009 and forthc.)



Metadata in CLC and ICLE (1/2) (Barker 2015)

Table 23.1. Metadata in *CLC* and *ICLE*

Type of metadata	<i>CLC</i>	<i>ICLE</i>
Participant	Age (single numbers and ranges) Gender First language Nationality (by country)	Age Male/Female Native language Nationality Father's mother tongue Mother's mother tongue Language(s) spoken at home (if more than one, please give the average % use of each)
	Education level	Education: primary school – medium of instruction Secondary school – medium of instruction Current studies Current year of study Institution Medium of instruction: English only/other language(s) (specify)/both
	Years studying English	Years of English at school Years of English at university Stay in an English-speaking country: where?/when?/how long? Other foreign languages in decreasing order of proficiency

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Metadata in CLC and ICLE (2/2) (Barker 2015)

	Full-time student or not Took a preparation course Reason for taking test (select from a set) Previously sat the same exam (i.e. is this a re-sit?) Other Cambridge English exams taken Area of work (if employed) CEFR level of the writing	
Scores	Overall scores/grades on the exam, by component and for the 1, 2 or more writing tasks completed	
Task rubric	The task is provided alongside the response – users see an image of it	Essay/Title
Context	Year of exam Exam name CEFR level of the exam	Approximate length required Conditions: timed/untimed Examination: yes/no Reference tools: yes/no What reference tools?: bilingual dictionary/ English monolingual dictionary/ grammar/other

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Variables: different labels

- CLC - ICLE
 - First language vs. native language
 - Nationality vs. country
 - Years studying English vs. Years of English at school + Years of English at university

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Variables: different categories

- Open CLC
- Arabic Learner Corpus

YEARS STUDYING ENGLISH

0-1

2

3

4

5

6+

Select All

NO YEARS LEARNING ARABIC

0

1

10

11

12

13

14

15

17

18

19

2

3

4

5

6

7

8

9

Select All

- Guangwai - Lancaster Chinese Learner Corpus
No such variable

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Proficiency

- **Four major ways** of assessing proficiency (Thomas 1994):
 - 1) impressionistic judgement
 - 2) use of institutional status as a proxy for proficiency level
 - 3) use of research-internal or in-house measures of proficiency
 - 4) standardized test scores
- In current learner corpora: considerable **variation**
 - No information at all
 - Institutional status
 - (more rarely) research-internal or standardized test scores
- Even when scores are available, it is often **unclear**
 - whether it is the learner or the text that has been assessed
 - whether the score involves all skills or only some subskills
- **Mapping** scores from different tests is problematic (Tono 2013)

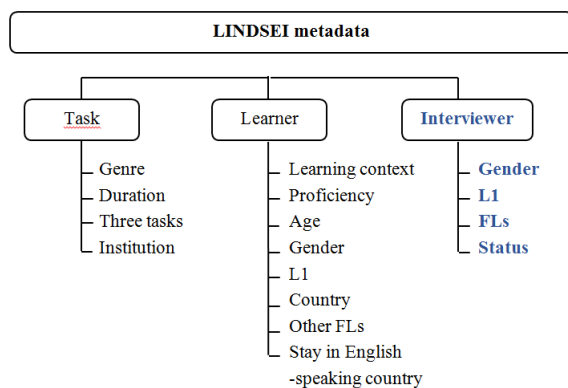
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Heterogeneity of learner corpus types

- Many learner corpora require **additional sets** of metadata
- **Oral data**
 - Editorial & analytical metadata: normalization & transcription guidelines
 - [For interview data]: Descriptive metadata for the interviewer

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LINDSEI (Gilquin et al., 2010)



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Peripheral learner corpora

- Often need more info about the use of external resources
- More controlled tasks
 - Picture used for picture description
- Learner translation corpora
 - Source text

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Multilingual Student Translation (MUST)

(Granger & Lefer 2017)

- Three layers of metadata are collected
 - **Source text**-related metadata
 - E.g. genre & sub-genre, domain, mode, target audience, sampling
 - **Translation task**-related metadata
 - E.g. type of task, grading, tools and resources (incl. CAT tools), feedback and revision, use of a translation brief (e.g. use of a reference translation memory or terminology database)
 - **Translator**-related metadata
 - E.g. language background, prior and current study background, self-rated proficiency in L1 and L2, translation experience (incl. experience with CAT tools)

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Missing metadata (1/2)

- Some learner variables that play a key role in SLA research are very rarely included in descriptive metadata
 - Cognitive and affective variables (e.g. aptitude, motivation)
 - Exposure to L2 (e.g. books, films, internet; interaction with native speakers)
- Some exceptions:
 - SCoolE (Secondary-Level Corpus of Learner English)
 - ICNALE (The International Corpus Network of Asian Learners of English)

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SCooLE (Möller 2017)

- **Exposure**
 - Frequency with which English is spoken outside school
 - Frequency with which English books and magazines are read outside school
 - Frequency with which English films and TV programmes are watched outside school
 - Frequency with which English websites are used outside school
- **Cognitive and affective variables**
 - Intelligence (several subscores: verbal, reasoning, concentration, etc.)
 - Motivation (several subscores: perseverance and effort, orientation towards performance and success, etc.)

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Missing metadata (2/2)

- **General factual information** on the corpus is often absent
 - Editorial metadata
 - Analytic metadata
 - Administrative metadata

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Where and in what form?

- **Heterogeneity of practices**

- Descriptive metadata

- Stand-alone metadata file: ICLE, LINDSEI, ICNALE, ETS Corpus of Non-Native Written English
- File header: EFCAMDAT, MERLIN, ASK
- Both representations: VESPA

- Editorial / administrative / analytical metadata

- File header: rarely
- Readme file / corpus manual: ICLE, ICNALE, LINDSEI, VESPA

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EFCAMDAT file header

```

<?xml version="1.0" encoding="UTF-8"?>
<selection id="a5eb4d70fca3f7aaf034e7a5f38248b7">
  <meta>
    <title>Education First - Cambridge Open Language
    Database</title>
    <version>EFCamDat_2.0 (EF201403)</version>
    <url>https://corpus.nml.cam.ac.uk/efcamdat/</url>
    <key>
    YmVFniw4LDIsNCw3LDMSw1LDE0LDE1LDEzLDEwLDEyLDE2
    csMzEsMjUsMjYsMjcs</key>
    <user>magali.paquot@uclouvain.be</user>
    <date>Sun, 26 Nov 17 20:44:12 +0000</date>
    <nationalities>be</nationalities>
    <units>1,2,3,4,5,6,7,8,9,10,11,</units>
  </meta>
  <writings>
    <writing id="20950" level="1" unit="1">
      <learner id="21493" nationality="be"/>
      <topic id="1">Introducing yourself by email
      </topic>
      <date>2011-04-24 04:55:40.147</date>
      <grade>99</grade>
      <text>
      Hello Anna! I'm fine, thanks. How are you? My
      name's Lukas. I'm 29 years old. Bye! Lukas.
      </text>
    </writing>
    <writing id="20951" level="1" unit="2">
      <learner id="21493" nationality="be"/>
      <topic id="2">Taking inventory in the office
      </topic>
      <date>2011-04-26 11:03:48.007</date>
  </writings>

```

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VESPA file header

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE TEI SYSTEM "vespa.dtd">
<TEI xml:id="BI0004-BUS-01">
  <teiHeader><fileDesc><titleStmnt><title>SPÅ2901 - Essay
  </title></titleStmnt><extent/>
  <publicationStmnt><distributor>VESPA Corpus
  </distributor></publicationStmnt>
  <notesStmnt><note resp="VESPA Project">Language used:
  <foreign xml:id="English">English</foreign></note><note
  resp="VESPA Project">Language used: <foreign xml:id=
  "foreign">foreign</foreign></note></notesStmnt>
  <sourceDesc><p n="File ID">BI0004-BUS-01</p><p n="Date"
  >02.11.2011</p>
  <p n="Module">SPÅ2901 - Business communication in
  English</p>
  <p n="Genre">Essay</p>
  <p n="Which type of text is it?(other)"></p><p n=
  "Written in the classroom?">No</p>
  <p n="Part of an examination?">No</p>
  <p n="Reference tools">Yes</p><p n="Please specify
  what reference tools: [dictionary]">N.A.</p>
  <p n="Please specify what reference tools: [grammar]">
  N.A.</p><p n="Please specify what reference tools:
  [scientific articles]">N.A.</p><n n="Please specif
  
```

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ASK corpus

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <?xml-stylesheet type="text/xsl" href="
  http://qandaf.uib.no/ask/ASK.xsl"?>
3 <!DOCTYPE TEI.2 SYSTEM "
  http://qandaf.uib.no/ask/ASK.dtd">
4 <TEI.2>
5 <teiHeader>
6 <fileDesc>
7 <titleStmnt>
8 <title>HN, januar 2000, SP - Elektronisk
  utgave</title>
9 </titleStmnt>
10 </fileDesc>
11 <profileDesc>
12 <particDesc>
13 <person>
14 <p id="01" n="pid">h0003</p>
15 <p id="02" n="testyear">2000</p>
16 <p id="03" n="testlevel">Høyere nivå</p>
17 <p id="04" n="country">Cuba</p>
18 <p id="05" n="language">spansk</p>
19 <p id="06" n="age">31</p>
20 <p id="07" n="gender">kvinne</p>
21 <p id="08" n="english">grunnivå</p>
22 <p id="09" n="education">
  høgskole/universitet</p>
23 <p id="10" n="yareduc">17</p>
24 <p id="11" n="doing">arbeider</p>
25 <p id="12" n="occupation">manuelt
  
```

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Lack of standardization

- Major differences in
 - Quality and quantity of metadata
 - Labels used to refer to them
 - Definitions
 - Metadata representation

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Metadata standardization in neighbouring fields

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Good practices?

- Second language acquisition
- Corpus linguistics
- Digital humanities

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CHAT transcription format

- CHILDES & Talkbank (MacWhinney, 2000)
- Documentation file
 - Acknowledgments, restrictions, warnings, pseudonyms, history, codes, biographical data, situational descriptions
- Obligatory file headers
 - @Languages
 - @Participants
 - @ID language|corpus|code|age|sex|group|socio-economic status|role|education|custom

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CHAT: optional file headers

- @Interaction type
- @Location
- @Number
- @Recording quality
- @Room layout
- @Tape location
- @Time duration
- @Transcriber
- @Transcription
- ...

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Indexing and registration of materials for language resource archives

- The CHILDES and TalkBank systems provide information that can be incorporated into:
 - OLAC (Online Language Archives Community)
 - CLARIN VLO (Virtual Language Observatory)
 - Component MetaData Infrastructure (CMDI)

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IRIS (Mardsen et al., 2016)

- A digital repository of instruments and materials for research into second languages
 - **Ontologies** for categorizing instruments and materials
 - Type of instrument
 - Data type
 - Participant type
 - Adolescent, adult, bilinguals, first language attriters, heritage learners, teacher trainees, young learners
 - Proficiency of learners
 - Domains of use
 - Academic, home, residence abroad, school, work
 - <https://www.iris-database.org/iris/app/home/search-help#3>

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A maze of standards for metadata description ...

- Text Encoding Initiative (TEI)
 - <http://www.tei-c.org/release/doc/tei-p5-doc/en/html/CC.html>
- Corpus Encoding Standard (CES; XCES)
 - <https://www.cs.vassar.edu/CES/>
- Simple Dublin Core
 - <http://dublincore.org/documents/dces/>
- ISLE Metadata Initiative
 - <http://www.mpi.nl/ISLE/>
- Component Metadata Infrastructure
 - <https://www.clarin.eu/content/component-metadata>

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TEI/TEI-Lite in corpus projects

- British Academic Spoken English (BASE)
- British National Corpus
- English-Norwegian Parallel Corpus
- English-Swedish Parallel Corpus
- Michigan Corpus of Academic Spoken English (MICASE)
- Oslo Multilingual Corpus
- PAROLE corpora (CES)
- Polish National Corpus
- Prague Spoken Corpus
- Russian Reference Corpus
- SCIENTEXT

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TEI-conformant learner corpora

- ACAW - Aachen Corpus of Academic Writing (ACAW): <http://www.anglistik.rwth-aachen.de/cms/Anglistik/Anglistik-Amerikanistik/Anglistische-Sprachwissenschaft/~gdgf/Kerz-Mit/?allou=1>
- ASK corpus
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.380.627&rep=rep1&type=pdf>
- CityU Corpus of Essay Drafts of English Language Learners:
https://corpling.uis.georgetown.edu/amir/pdf/annis_cityu_prepub.pdf
- COPLE2 Corpus
http://www.lrec-conf.org/proceedings/lrec2016/pdf/439_Paper.pdf
- NOCE corpus
<http://www.sfs.uni-tuebingen.de/~dm/handouts/evo-paris-09-05-28.pdf>
- Hanken Corpus of Academic Written English for Economics (Mäkinen & Hiltunen, 2016)
- Polish Learner English Corpus (TEI Lite):
<http://www.lancaster.ac.uk/fass/projects/corpus/cbls/corpora.asp>
- VESPA
<https://uclouvain.be/en/research-institutes/ilc/cecl/vespa.html>

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Text Encoding Initiative (TEI)

- “**de facto standard** for scholarly work with electronic texts” (Zanettin, 2011: 112)
 - Wide range of digital resources: literary studies, manuscript studies, dictionaries, language corpora, etc.
- “set of **predefined tags** for document elements and structural relations among them, providing a framework for the annotation of **structured information** in a **header** containing meta-textual information and in the **text** itself” (ibid)
- XML

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TEI header

Five main components

1. **fileDesc** (file description) contains a full bibliographic description of an electronic file.
2. **encodingDesc** (encoding description) documents the relationship between an electronic text and the source or sources from which it was derived.
3. **profileDesc** (text-profile description) provides a detailed description of non-bibliographic aspects of a text, specifically the languages and sublanguages used, the situation in which it was produced, the participants and their setting.
4. **xenData** (non-TEI metadata) provides a container element into which metadata in non-TEI formats may be placed.
5. **revisionDesc** (revision description) summarizes the revision history for a file.

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TEI header

```

<teiHeader>
  <fileDesc>
    <titleStmt>
      <title>
        <!-- title of the resource -->
      </title>
    </titleStmt>
    <publicationStmt>
      <p>
        <!-- Information about distribution of the resource -->
      </p>
    </publicationStmt>
    <sourceDesc>
      <p>
        <!-- Information about source from which the resource derives -->
      </p>
    </sourceDesc>
  </fileDesc>
</teiHeader>

```

<http://www.tei-c.org/release/doc/tei-p5-doc/en/html/HD.html>

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Corpus module: text description

```

<textDesc n="novel">
  <channel mode="w">print; part issues</channel>
  <constitution type="single"/>
  <derivation type="original"/>
  <domain type="art"/>
  <factuality type="fiction"/>
  <interaction type="none"/>
  <preparedness type="prepared"/>
  <purpose type="entertain" degree="high"/>
  <purpose type="inform" degree="medium"/>
</textDesc>

```

<http://www.tei-c.org/release/doc/tei-p5-doc/en/html/CC.html>

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Corpus module: Participant description

```
<person sex="2" age="mid">
  <birth when="1950-01-12">
    <date>12 Jan 1950</date>
    <name type="place">Shropshire, UK</name>
  </birth>
  <langKnowledge tags="en fr">
    <langKnown level="first" tag="en">English</langKnown>
    <langKnown tag="fr">French</langKnown>
  </langKnowledge>
  <residence>Long term resident of Hull</residence>
  <education>University postgraduate</education>
  <occupation>Unknown</occupation>
  <socecStatus scheme="#pep" code="#b2"/>
</person>
```

<http://www.tei-c.org/release/doc/tei-p5-doc/en/html/CC.html>

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Transcriptions of speech

```
<recording type="audio" dur="P10M">
  <equipment>
    <p>Recorded from FM Radio to digital tape</p>
  </equipment>
  <broadcast>
    <bibl>
      <title>Interview on foreign policy</title>
      <author>BBC Radio 5</author>
      <respStmt>
        <resp>interviewer</resp>
        <name>Robin Day</name>
      </respStmt>
      <respStmt>
        <resp>interviewee</resp>
        <name>Margaret Thatcher</name>
      </respStmt>
      <series>
        <title>The World Tonight</title>
      </series>
      <note>First broadcast on <date when="1989-11-27">27 Nov 1989</date>
      </note>
    </bibl>
  </broadcast>
</recording>
```

<http://www.tei-c.org/release/doc/tei-p5-doc/en/html/TS.html#HD32>

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Is TEI prescriptive?

- “There has long been a perception that the TEI is a prescriptive model, as indeed in some respects it is: it prescribes a number of very specific constraints for documents claiming to be TEI conformant, for example. However, the prescriptive part of the TEI is concerned only with how the TEI definitions are to be deployed; very few prescriptions are provided as to which of the many hundreds of TEI-defined concepts should be selected in a given context” (Burnard 2017)

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CMC corpora network (Beißwenger et al., 2017)

- Computer Mediated Communication and social media interactions
- TEI special interest group on CMC
 - Extend the TEI framework with additions dedicated to the representation of the structural and linguistic peculiarities of CMC genres
 - Schemas developed following the rules for customization described in the TEI guidelines
 - To be presented to the TEI Technical Council in the form of feature requests, i.e. suggestions for the extension of the ‘official’ TEI standard.

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Towards standardization of learner corpus data

WORK IN PROGRESS

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Two important considerations

1) Impossible to design metadata for any type of corpus

⇒ Focus on core metadata and design a flexible system that allows for addition/deletion/expansion of fields

2) Learner corpus research is interdisciplinary

Corpus linguistics, SLA, teaching, lexicography, testing, NLP, translation studies, etc. have their own specific needs as regards metadata

⇒ Essential to reach out to these different communities to ensure that their specific needs in terms of metadata are met

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Standardisation

- **Encoding**
 - UTF8 (Universal Character Set Transformation Format - 8 bits)
- **Text**
 - Linguistic annotation
 - Transcriptions
 - Error annotation
- **Metadata**
 - Representation format
 - **Categories**

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Metadata for LCR

- **Core metadata**
 - Labels + categories
- **Sources**
 - Available learner corpus metadata (CECL projects, ASK, EFCAMDAT, MERLIN, learner corpora available via Sketch Engine, etc.)
 - Also learn from TEI/XCES guidelines
 - Missing editorial & administrative metadata
 - Established labels (e.g. occupation, age)
- Essential to have a good **readme file/manual** to define all the variables

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Core metadata for learner corpora

- **Our proposal: five main components**

- 1) Administrative metadata
- 2) Corpus design metadata
- 3) Annotation metadata
- 4) Text metadata
- 5) Learner metadata

→ see Draft Proposal on handout

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Preliminary validation of core metadata

- Confront draft proposal with metadata from existing learner corpora
 - CECL learner corpora
 - ICLE
 - LINDSEI
 - LONGDALE
 - VESPA
 - Other learner corpora

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Additional modules

- Integration of **specialized metadata**
 - Multimodal learner corpora (Freigang & Bergmann, 2013)
 - Info on modality (gestures, eye-gaze, facial expressions)
 - Translation learner corpora
 - Info on source text to be translated, etc.
 - CLIL learner corpora
 -

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Next steps

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Planned steps

- Submission of the « beta version » of LC metadata scheme to members of the Learner Corpus Association (LCA)
<http://www.learnercorpusassociation.org/>
- Adaptation and finalization of the metadata scheme based on feedback received
- Concurrent work on representation formats
- Maintenance of the metadata standards by the LCA

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Community and metadata standards

- “Metadata schemas develop in response to a **community need** and often gain wide acceptance, or are widely used while still in development. Maintenance by nationally or internationally recognised centres of excellence (...) or support from a **professional body** increases both visibility and take-up so that they become a community's standard schema” (Higgins 2007)

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Representation format (1/2)

- Metadata location
 - Separate metadata file or file header
- “TEIfy” our LC metadata
 - Administrative metadata:
 - <fileDesc><titleStmt> ; <publicationStmt> <distributor>
/ <availability> <licence> ; <editionStmt> <edition>
 - Annotation metadata
 - TEI language corpora module
 - Corpus design / text / learner metadata
 - Longitudinal, proficiency levels, etc.

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Representation format (2/2)

- Help from a TEI expert
- TEI customization? TEI extension?
 - See CMC project (Beißwenger et al., 2017)
- Submit a CLARIN CMI module for LC metadata

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Metadata editor and user interface

- “the extent to which established standards are used is determined by the availability of tools that work with this standardized data” (Lehmberg & Wörner 2008)
- One major desideratum: **user-friendliness**
- Two essential tools
 - Metadata editor (cf. Koeva et al. 2016: “MetaEditor: a tool for manual metadata editing and verification”)
 - User interface

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Two examples of user interfaces

- **ICLEv3** (Granger, Meunier, Paquot & Dupont forthc. 2018)
 - Check boxes
 - Dynamic size visualization (number of texts and number of words)
- **Hypal4MUST** (Granger, Lefer & Obrusnik in preparation)
 - Pull-down menus
 - Conditional fields

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ICLEv3

International Corpus of Learner English

selected criteria: [RESET ALL](#) selected texts: 3456

[sociolinguistics criteria](#) [learner criteria](#) [textual criteria](#) [fine texts selection](#) [download texts](#) [concordances](#)

Gender	Country	Native language
<input type="checkbox"/> Female (1524)	<input type="checkbox"/> Bosnia Herzegovina (144)	<input type="checkbox"/> Albanian (0)
<input type="checkbox"/> Female (1099)	<input type="checkbox"/> Brazil (419)	<input type="checkbox"/> Arabic (2)
<input type="checkbox"/> Male (725)	<input type="checkbox"/> Greece (460)	<input type="checkbox"/> Aromanian (Vlach) (1)
<input type="checkbox"/> Unknown (4)	<input type="checkbox"/> Hungary (435)	<input type="checkbox"/> Bosnian (2)
<input type="checkbox"/> male (9)	<input type="checkbox"/> Iran (359)	<input type="checkbox"/> Greek (458)
	<input type="checkbox"/> Korea South (401)	<input type="checkbox"/> Hungarian (438)
	<input type="checkbox"/> Lithuania (409)	<input type="checkbox"/> Korean (401)
	<input type="checkbox"/> Macedonia (335)	<input type="checkbox"/> Lithuanian (335)
	<input type="checkbox"/> Montenegro (2)	<input type="checkbox"/> Macedonian (917)
	<input type="checkbox"/> Pakistan (313)	<input type="checkbox"/> Other (2)

Age	1st language at home	2nd language at home	3rd language at home
min: 16	<input type="checkbox"/> Albanian (0)	<input type="checkbox"/> Arabic (2)	<input type="checkbox"/> Dutch (1)
max: 1000	<input type="checkbox"/> Arabic (2)	<input type="checkbox"/> Aromanian (Vlach) (1)	<input type="checkbox"/> English (4)

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Hypal4MUST

- **Conditional input fields** (the choice of a field conditions the number and types of subsequent fields) and **pull-down menus**
 - E.g. speech or writing. If speech: transcribed or keyed-in, sound files or only transcriptions, etc.
 - E.g. task duration: untimed or timed. If timed: duration in minutes

Conclusion

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Challenge of standardization efforts (Burnard 2017)

- “there is a long-running tension within all standardisation efforts consequent on an opposition between **generality** and **customization**. The more generally applicable a standard, the harder it may be to use productively in a given context; the more tailored it is to a given context, the less useful it is likely to be elsewhere. Yet surely one of the main drivers behind the urge to go digital has always been the ability **not just to have one’s cake and to eat it, but also to have many different kinds of cake from the same messy dough**. For this to work, there is a need for standards which do not limit choice, but rather facilitate an accurate presentation of the choices made”.

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Learner corpus research

- Field in rapid expansion
 - *Learner Corpora around the World* webpage: 163 learner corpora
- Time to work on standardisation
 - Metadata, annotation, transcription
- Improve study quality (cf. also Paquot & Plonsky, 2017)

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*Thanks for your attention and
feedback !*

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