

ConT_EXt at the Mendel University: Teaching, Thesis, Topics

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13th ConT_EXt Meeting / Bassenge, Belgium
16 – 21 September 2019

The talk describes the experience with teaching ConTeXt to student of different study programmes at Mendel University in Brno, Czech Republic.

It focuses on teaching process, different goals, writing thesis etc., positive features as well as troubles will be mentioned, too. Finally, former, current and future topics based on ConTeXt for students' thesis will be briefly presented.

Three courses:

Design Studio 2

Bachelor Seminar

Modern Typesetting Technologies Club

Faculty of Forestry and Wood Technology
Field: Design of production
Last term

Aim:

Design of documents dealing with furniture production

Use of ConT_EXt:

only for writing bachelor thesis

Faculty of Business and Economy
Field: Computer Science
Preultimate term

Aim:

Theory and practice of writing thesis

Use of ConT_EXt:

for writing bachelor thesis

Teaching / Modern Typesetting Technologies Club :6

Faculty of Business and Economy (+ open for all)

Field: Any, but Computer Science

Any term

Aim:

learn ConT_EXt or any typesetting technology etc.

Use of ConT_EXt:

for anything

Teaching / Modern Typesetting Technologies Club :7

Added value:

- Students' projects
- Recruitment for bachelor topics

Teaching / Modern Typesetting Technologies Club / Students' Projects

:8

- Writing pieces of documentation
- Localisation (`lang-def.mkiv`, `lang-txt.lua`):
2018: Belarussian, Bulgarian, Macedonian, Serbian
Status: (will be sent to Hans immediately)
2019: another four languages

(recorded in `mtx-patterns.lua`)

Languages: Czech, Slovak, English

For writing thesis: **ctx-thesis.tex**

Status: work, documentation in the embryonic development :-)

For references: **bib.sty**

*Status: work, documentation exists, but incomplete
presented at Břejlov 2010, CSTUG Bulletin 2008*

Aim:

Fast markuping

Genesis:

from Word to ConTEXt

Design Studio 2

2016:	1	/	5	20%	
2017:	3	/	7	42%	
2018:	10	/	17	59%	
2019:	12	/	13	92%	(+ 1x InDesign)

```
\setupthesis[cz,mendelu,ldf,undb][ % lang,university,faculty,department
  type={bp},
  authorname={Amy},
  authorsurname={Smith},
  authortitle={},
  authorgender={F},
  supervisor={Prof. Bob Taylor}
  title={Nový trendy v...},
  titleen={New trends in...},
  keywords={konferenční stůl, staré dřevo, návrh},
  keywordsen={coffee table, old wood, design},
  acknowledgement={...},
  abstract={...},
  abstracten={...},
  location={Brno},
  year={2019},
  thesisassignmentform={img/file001.png,img/file002.png},
]
```

+:

FastA

Good typesetting result

-:

TeXWorks

Designers need a tutor

Unified design, to be solved

Example:

```
\publA{  
  \autor{Knuth, D.}  
  \nazev{The \TeX{}book}  
  \nakl{Boston}{Addison Wesley}  
  \vyd{1}  
  \rok{1986}  
  \isbn{0-201-13448-9} \rozsah{483\stran}  
}
```

Three areas of topics:

Tools for User-friendly Work

Fonts – Designing and Testing

Modules for ConT_EXt

Adam Hanuš: **ConT_EXt source code checker**

Status: submitted, presented in Nasbinals 2015, not published yet

Dominik Makeš: **Typochecker for ConT_EXt sources**

Status: submitted, presented in Nasbinals 2015, not published yet

Web application for designing the layout in ConT_EXt

JavaScript, output: ConT_EXt source, some XML

Status: at the beginning

(Question: Does exist any XML for layout definition?
Answer: Probably not.)

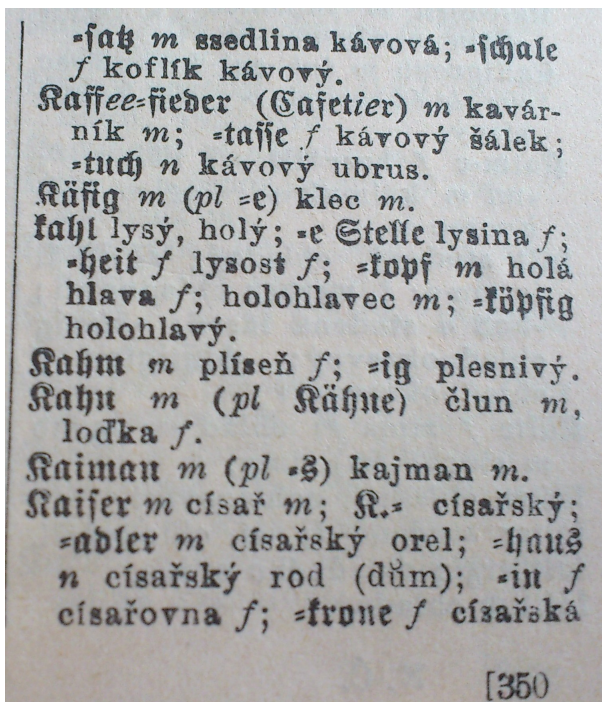
Dominik Makeš: **Black letter digitization.** 2013

U	B	C	D	E	a	b	c	d	e	f	g
F	G	H	I	K	h	i	j	f	l	m	n
O	M	N	V	P	o	p	q	r	f	s	ß
Q	R	S	T	U	t	u	v	w	x	h	z
Z	W	X	Y	Z							

ch d̄ d ff fi ff fl ff ſ ů ů h

Status: submitted, not published; revision needed

Dominik Makeš: Black letter digitization. 2013



-faß m ssedlina kávová; -schale f koflík kávový.
 Kaffee-fieder (Cafetier) m kavár-ník m; -tasse f kávový šálek;
 -tuch n kávový ubrus.
 Käfig m (pl =e) klec m.
 kah! lysý, holý; -e Stelle lysina f;
 -heit f lysost f; -kopf m holá hlava f; holohlavec m; -köpfig holohlavý.
 Rahm m plíseň f; -ig plesnivý.
 Rahn m (pl Rähne) člun m, loďka f.
 Raiman m (pl =s) kajman m.
 Kaiser m císař m; R. = císařský;
 -adler m císařský orel; -haus n císařský rod (dům); -in f císařovna f; -trone f císařská

[350]

Tomáš Przybek: **Spanish rotunda: digitization font using FontForge program.** 2013

quem dixere chaos rudis indigestaque moles
nec quicquam nisi pondus iners congestaque
non bene iunctarum discordia semina rerum
nullus adhuc mundo praebat lumina titan

quem dixere chaos rudis indigestaque moles
nec quicquam nisi pondus iners congestaque
non bene iunctarum discordia seminarum
nullus adhuc mundo praebat lumina titan

Status: submitted, not published; revision probably not needed

Currently assigned topic:
Cyrilic letters for Pagella

(in co-operation with Jacko)

Status: first partial proposal

Currently assigned topic:

Quality Testing of Existing Computer Fonts

Status: not far from the starting point

Marek Třešák: Creation of vexillographic module with the use of MetaPost and Lua languages. 2016

Přílohy

47

A Ukázky vygenerovaných vlajek pomocí modulu



Přílohy

48



Přílohy

49



Marek Třešák: Creation of vexillographic module with the use of MetaPost and Lua languages. 2016

Přílohy

47

A Ukázky vygenerovaných vlajek pomocí modulu



Albánie



Arménie



Ázerbájdžán



Belgie



Bělorusko



Bosna a Hercegovina



Bulharsko



Česká republika



Dánsko



Estonsko



Evropská unie



Finsko



Francie



Gruzie



Chorvatsko

Status: submitted, documented, not published

Martin Šebela: Creation of music engraving module for system ConTeXt. 2019

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Příloha 2 - Ukázka vygenerovaného notového souboru modulem

1
Echigo Jishi

Y. Naga
K. Kobayashi

Musical score for Echigo Jishi, featuring a single melodic line in treble clef with a 2/4 time signature. The score consists of eight staves of music.

Transcription donated to the public domain, 2005 by Tom Petrá

Příloha 2 - Ukázka vygenerovaného notového souboru modulem

2

Lieder eines fahrenden Gesellen 4. Die zwei blauen Augen. (Page 1)

Gustav Mahler
Gustav Mahler

Musical score for Lieder eines fahrenden Gesellen, featuring a vocal line in treble clef and piano accompaniment in bass clef. The score consists of four systems of music.

Copyright © 2002 MobyData, Inc.

Martin Šebela: Creation of music engraving module for system ConTeXt. 2019

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Demonstrace změn pomocí parametrů
Sazba na mrazní sířku

© Šebela

Šebela Šebela

Musical score for 'Sazba na mrazní sířku' in 4/4 time. It features three systems of music. The first system includes a vocal line with a melisma 'pp' and a piano accompaniment. The second system continues the piano accompaniment. The third system shows the vocal line and piano accompaniment. The score is rendered in a clean, professional font with clear notation.

Příloha 2 - Ukázka vygenerovaného notového souboru modulem 51

4

Musical score for 'Sazba na mrazní sířku' in 4/4 time, showing a different rendering of the same piece. It features three systems of music. The first system includes a vocal line with a melisma 'pp' and a piano accompaniment. The second system continues the piano accompaniment. The third system shows the vocal line and piano accompaniment. The score is rendered in a clean, professional font with clear notation.

2019 copyright

Martin Šebela: **Creation of music engraving module for system ConT_EXt. 2019**

MusicXML + Lua + MetaPost → PDF

*Status: submitted, short documentation, not published;
need to be continued*

Currently assigned topic:

Module for drawing charts for economists

Status: will be solved till May 2020 (hope)

Ideas for new topics

Info and experience with the current and new topics

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