ATA Conference 2005: Session TAC-7

Introduction to Word Macros and Their Applications

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Introduction to Word Macros and Their Applications

Abstract: Macros can assist with common tasks and are tools for automating repetitive processes. This presentation will provide an introduction to using Word macros for translation tasks, e.g. preparing glossaries or other documents for MultiTerm or TMW import, and repetitive formatting or modifications. We will take first steps with Visual Basic for Applications (VBA), the programming language for Word macros, and see examples of recording and adapting macros. Participants will also receive a WWW listing of downloadable macros and a bibliography of relevant printed and on-line publications.

Overview

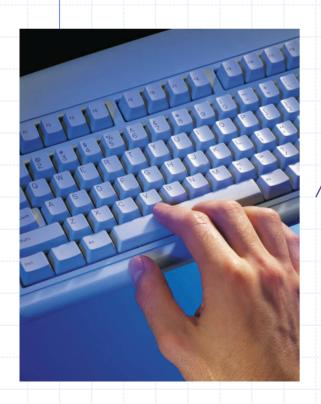
- Purpose of Macros
- VBA Concept and Terminology
- Introduction to VBA for MS Word
- VBA applications for translators
- Online learning and community
- Bibliography

1. Purpose of Macros

en.wikipedia.org/wiki/Macro: "The purpose of macros is to either automate frequently-used sequences or enable a more powerful abstraction but these are often the same thing. ... In most situations, the use of the word "macro" implies expanding a small command or action into a larger set of instructions."

Purpose (continued)

In other words: ... work more efficiently



Sub Macro1()

' Macro1 Macro

' Macro recorded 11/10/2005 by Karl Pfeiffer

Selection.HomeKey Unit:=wdStory

Selection. Whole Story

Selection.Font.Bold = wdToggle

Selection.Copy

Selection.EndKey Unit:=wdStory

End Sub

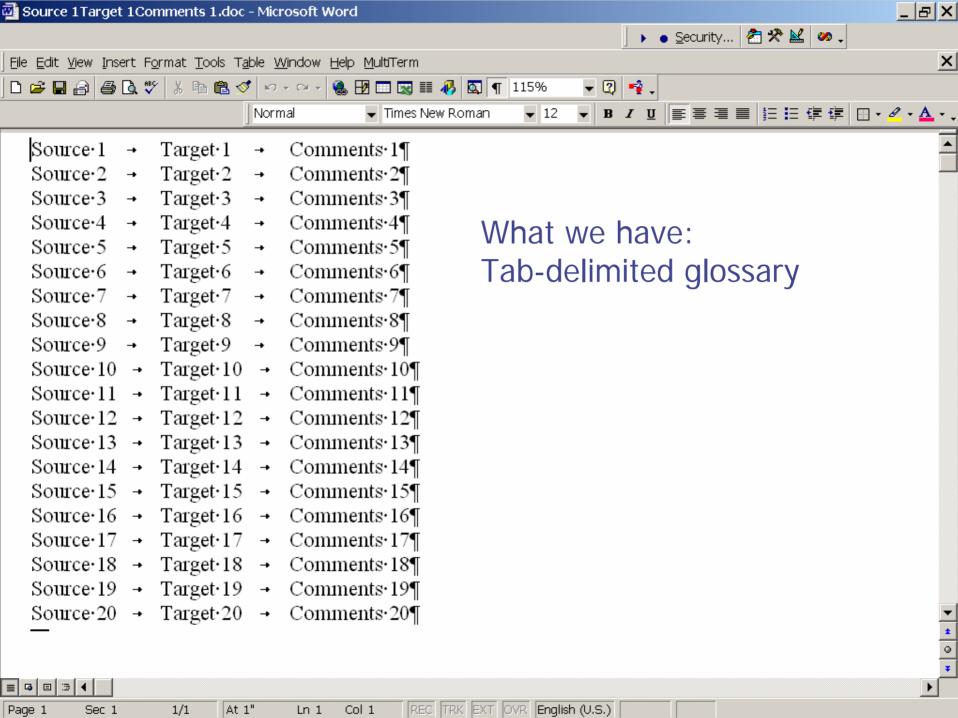
1.1 Case Study 1

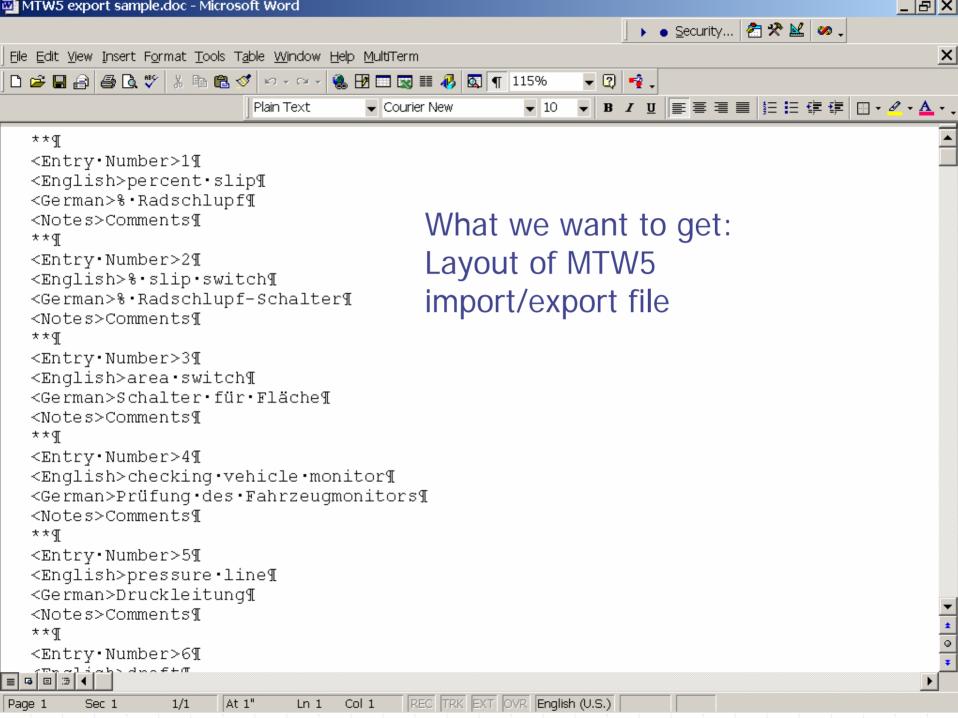
Working with glossaries ...

Example:

tab-delimited bilingual glossary

Trados MTW file structure

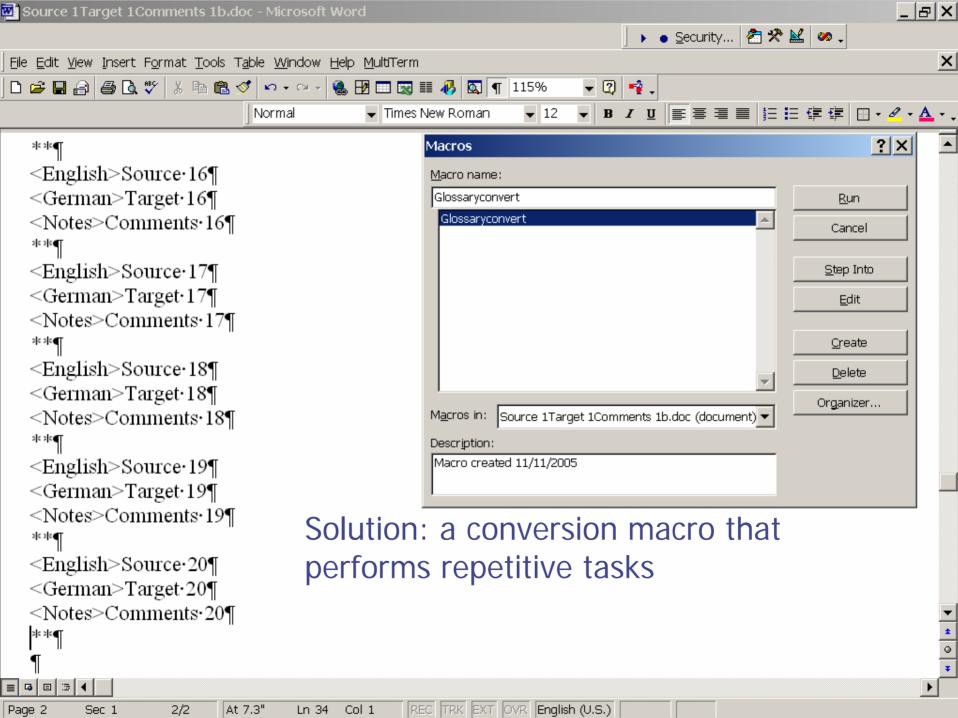




1.1 Case Study 1

Working with glossaries ...

Example: convert with macro



2.VBA Concept and Terminology

♦ VBA = Visual Basic for Applications

2.1. History

http://en.wikipedia.org/wiki/BASIC_programming_language:

"BASIC's name stands for *Beginner's All-purpose Symbolic Instruction Code*. ...

BASIC is a family of high-level <u>programming languages</u>.

Originally devised as an easy-to-use programming language. ...

It was devised in <u>1963</u> by Profs. <u>John G. Kemeny</u> and <u>Thomas</u> <u>E. Kurtz</u> of <u>Dartmouth College</u>."

2.1. History (continued)

http://en.wikipedia.org/wiki/Visual_Basic:

"Visual Basic (VB) is an <u>event driven programming language</u> and associated <u>development environment</u> created by <u>Microsoft</u>. In business programming, it has one of the largest user bases.

It is derived heavily from **BASIC**...

...derivatives of Visual Basic for use in <u>scripting</u> ... <u>applications</u>:

Visual Basic for Applications (VBA) is included in many Microsoft applications (like Microsoft Office). There are small inconsistencies in the way VBA is implemented in different applications, but it is largely the same language as VB6."

2.1. History (continued)

http://en.wikipedia.org/wiki/Visual_Basic_for_Applications:



"It supersedes and expands on the capabilities of earlier applicationspecific macro programming languages such as Word's WordBasic, and can be used to control almost all aspects of the host application, including manipulating user interface features such as menus and toolbars and working with custom user forms or dialog boxes.

As its name suggests, VBA is closely related to <u>Visual Basic</u>, but can normally only run code from within a host application rather than as a <u>standalone application</u>. It can however be used to control one application from another (for example automatically creating a <u>Word report from Excel</u> data)."

2.2. Interface

... is included in many Microsoft applications

So, where do we find it?

2.2. Interface (continued)

Tools > Macro > Visual Basic Editor

Current version: 6.3

- Features:
 http://msdn.microsoft.com/isv/technology/vba/features/default.aspx
- ◆ FAQ:

http://msdn.microsoft.com/isv/technology/vba/faq/default.aspx

2.2. Interface (continued)

- Main VBE window
 - 3 sub-windows:
 - * Project Explorer
 - * Properties Window
 - * Code Window

2.3. Terminology

- Project: A set of modules
- Module: file containing codes for macros and procedures
- Procedure: sequence of instructions that performs a specific task

2.3. Terminology (continued)

- Object-oriented programming (OOP):
- Object: specific characteristics and behavior,
 e.g. documents and tables
- Property: named attribute of an object, e.g. column width or row height of a table
- Method: action performed by an object, e.g. Sorting a table column

3. Introduction to VBA for MS Word

Example:

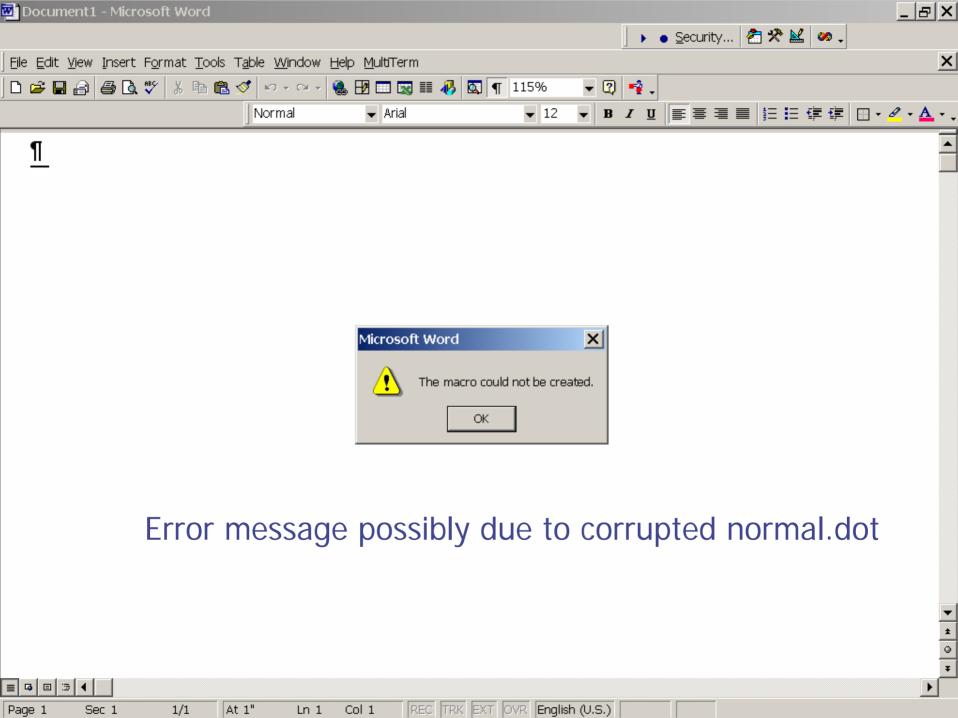
tab-delimited bilingual glossary

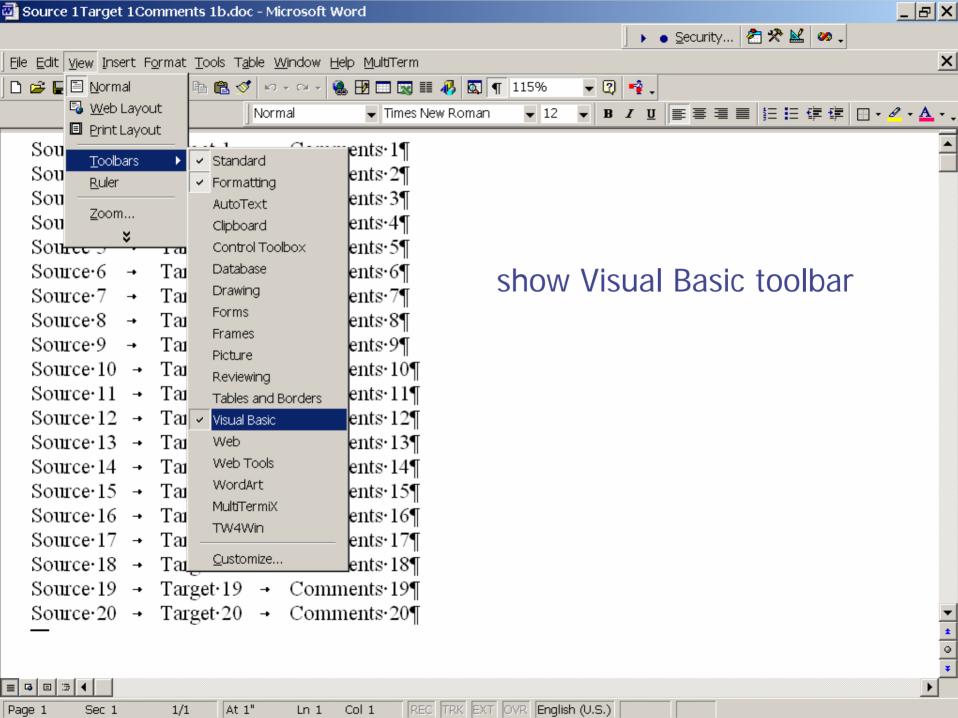
Settings:

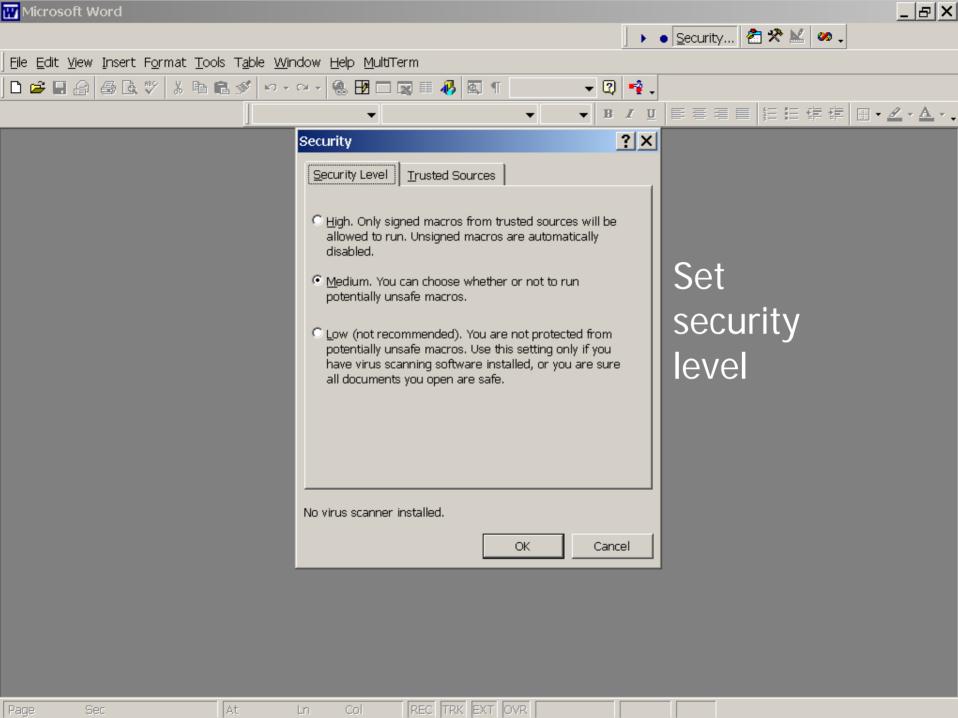
- fresh normal.dot

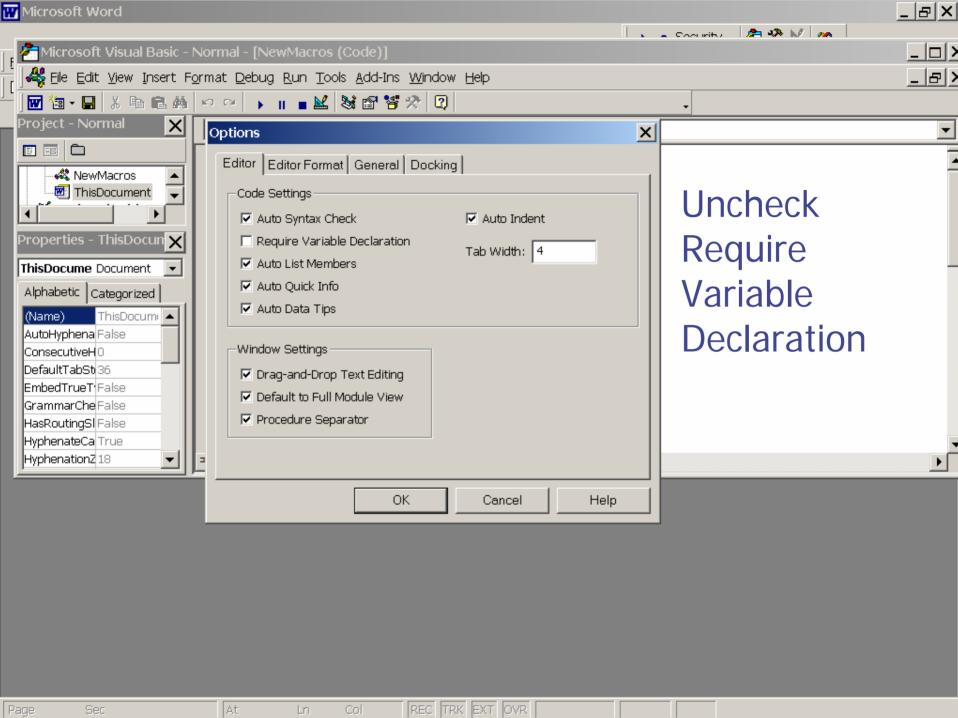
in: C:\Documents and Settings\<user name>\ Application Data\Microsoft\Templates

- Visual Basic Toolbar
- Security
- clear Require Variable Declaration







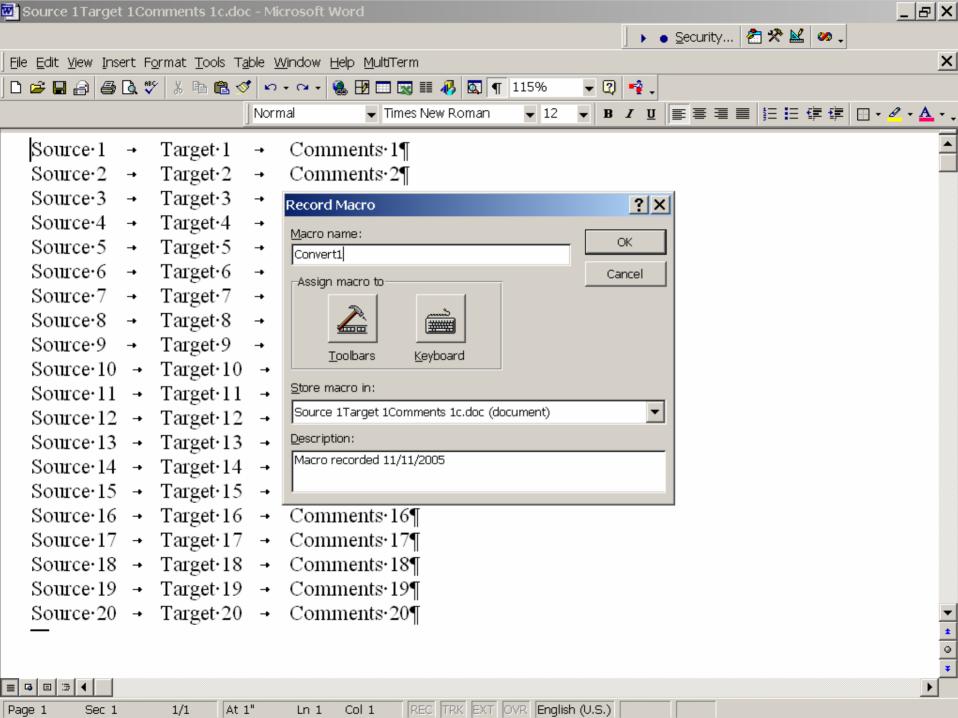


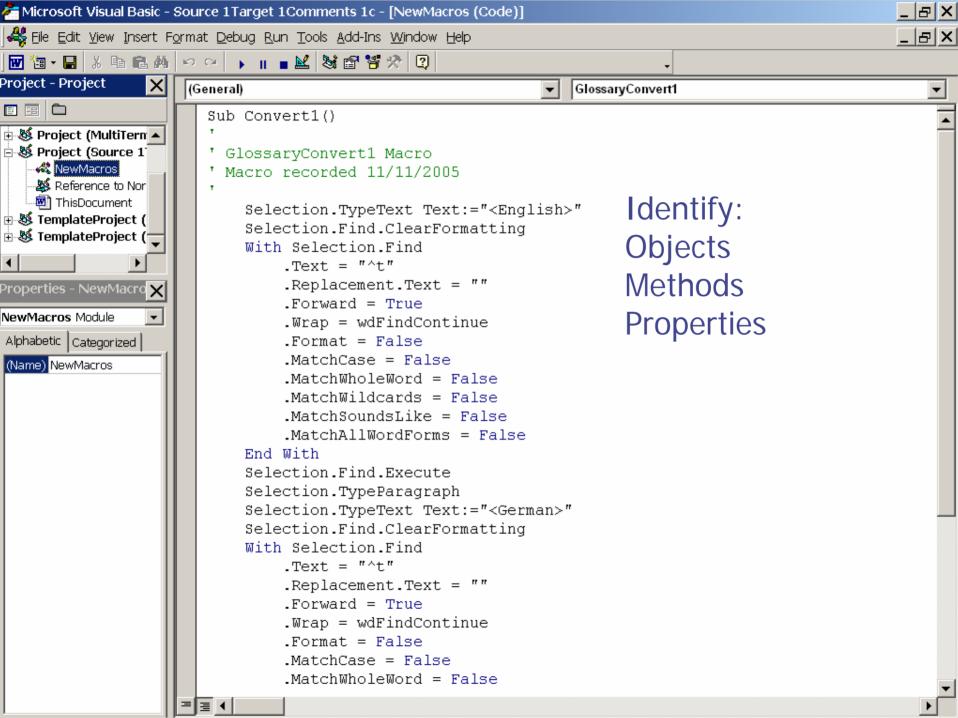
3. Introduction (continued)

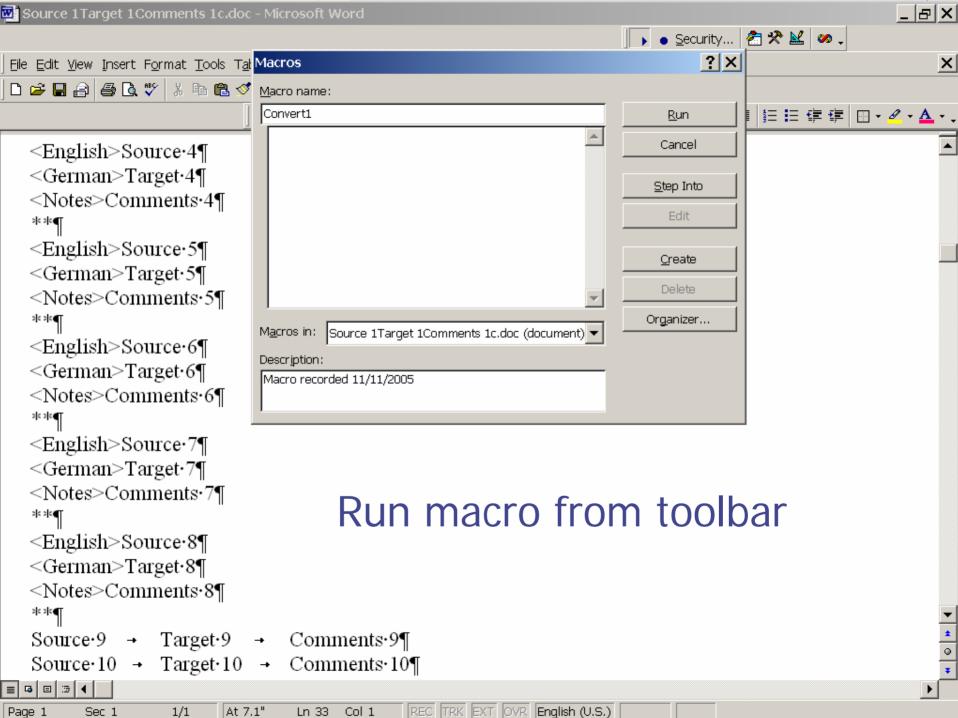
Example:

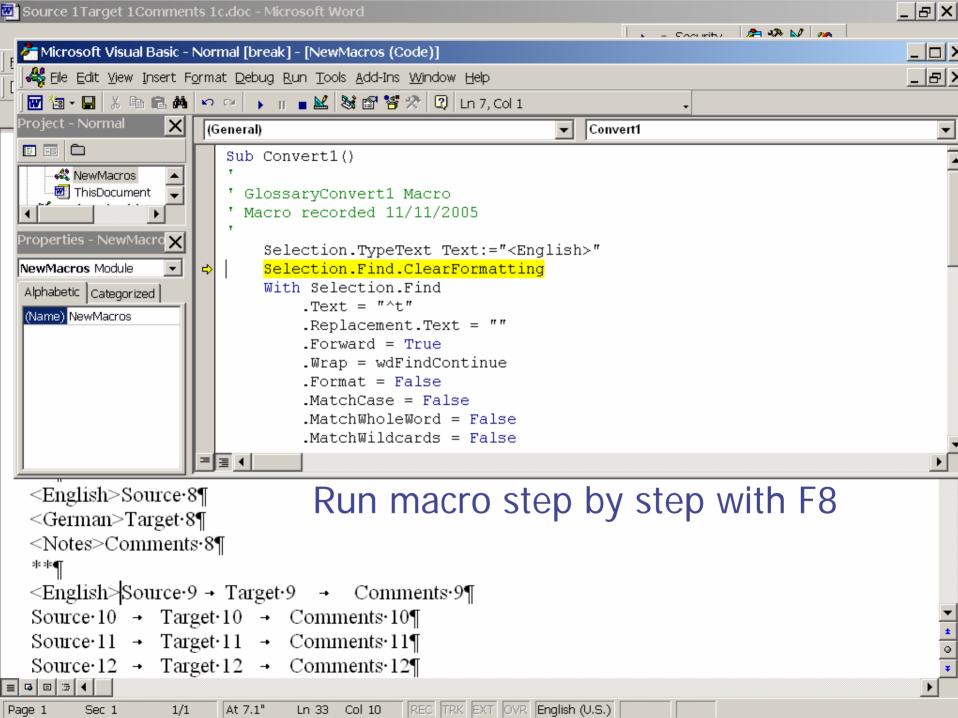
tab-delimited bilingual glossary

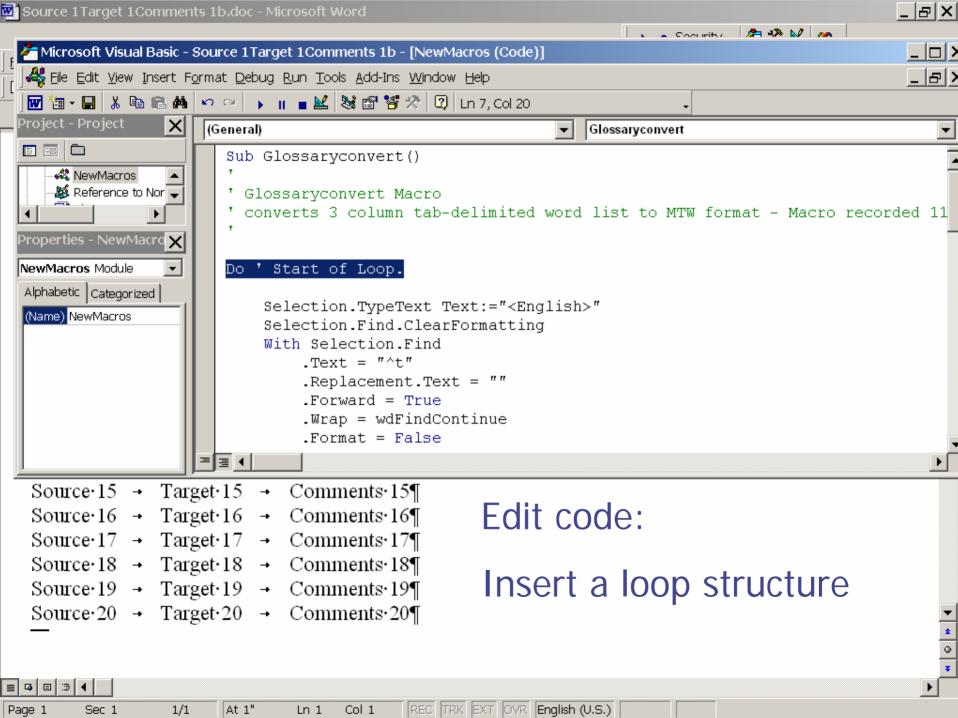
use Macro Recorder to get a head start

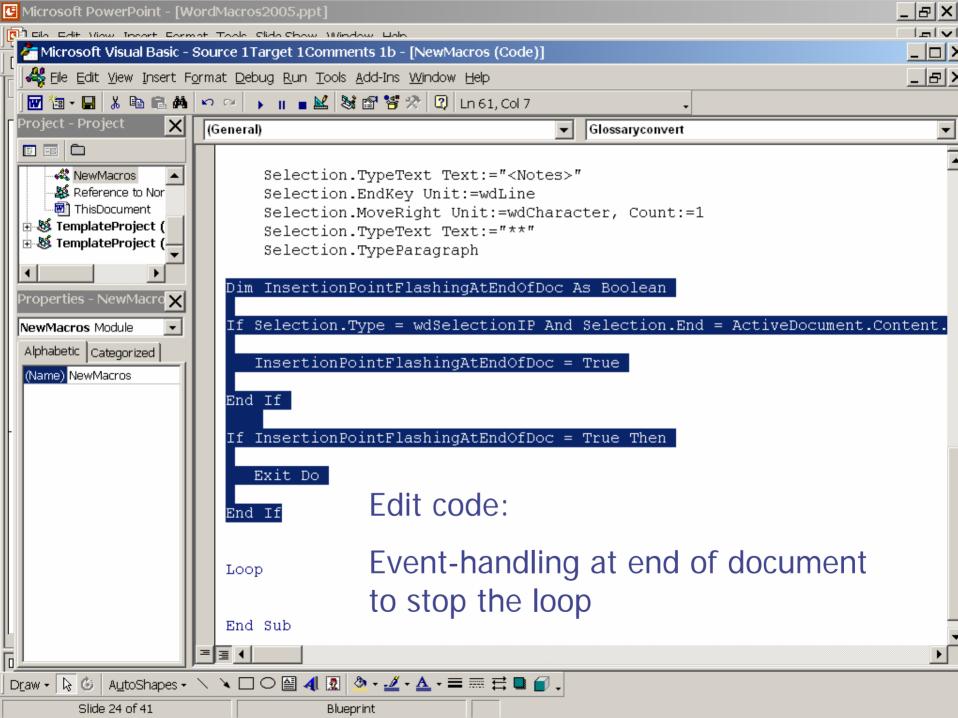


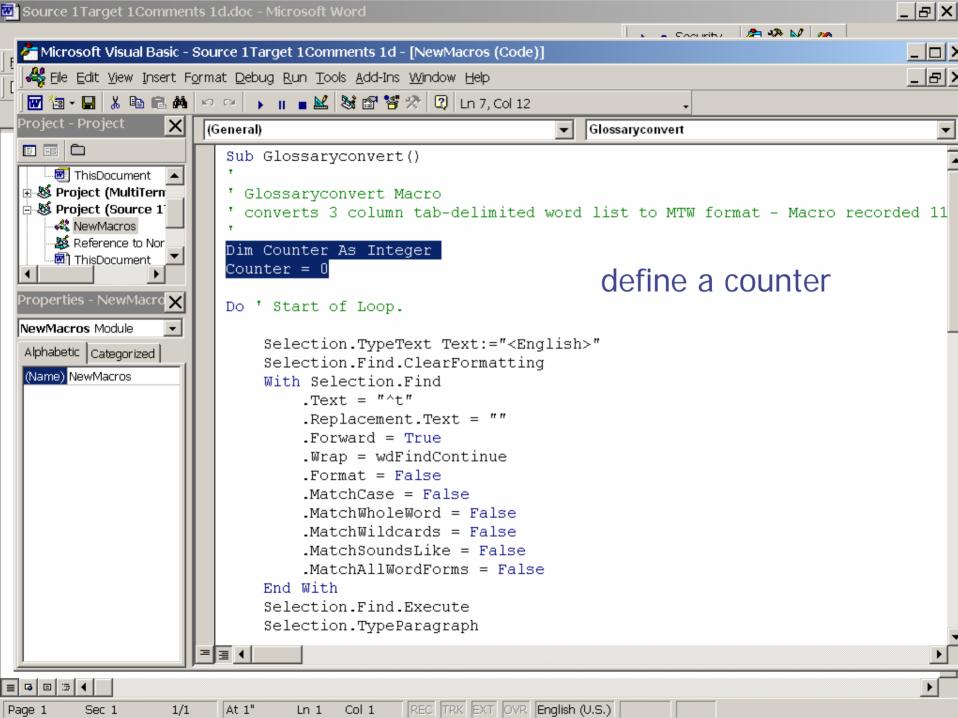


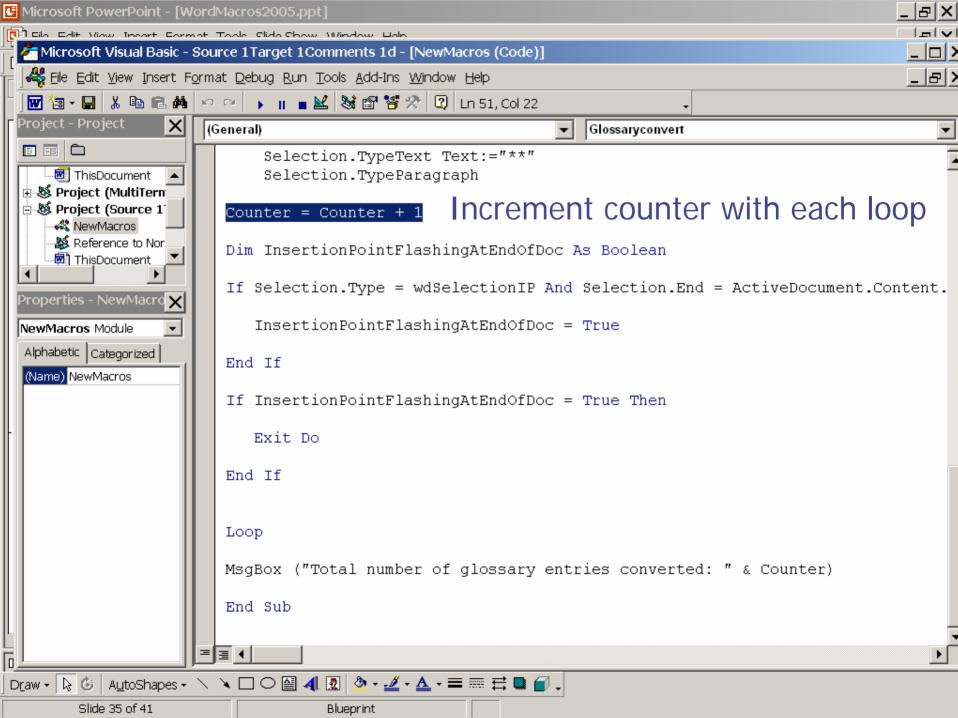


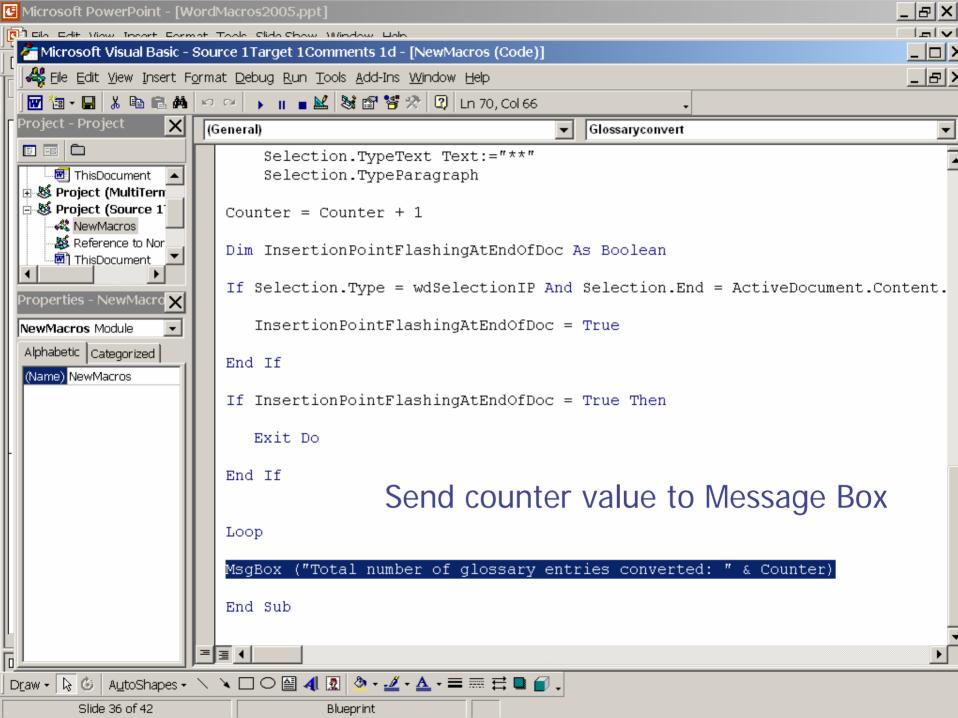


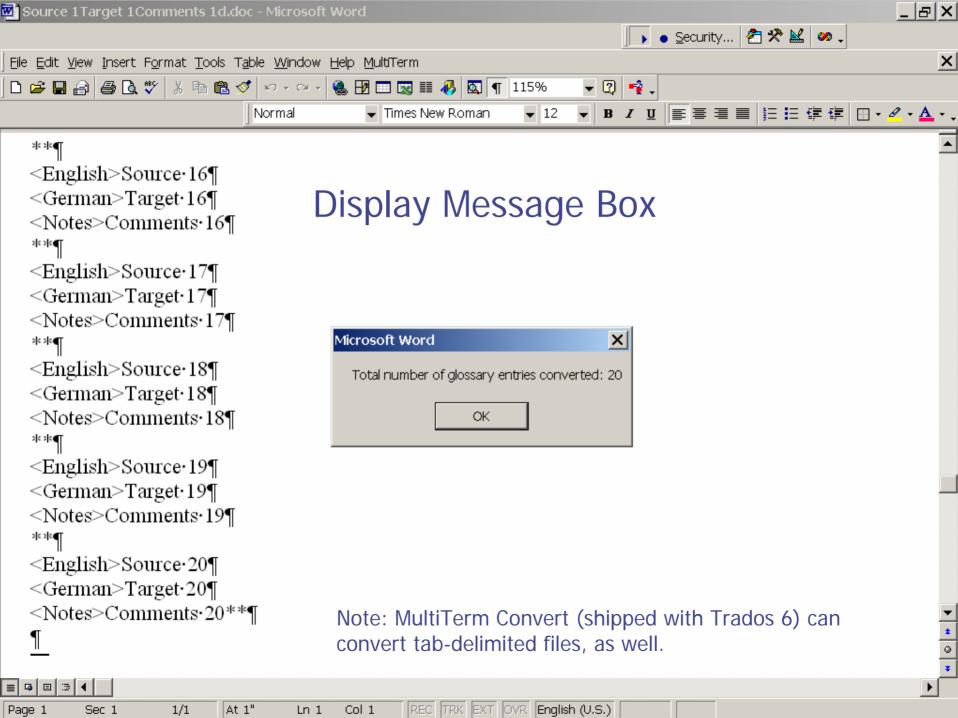








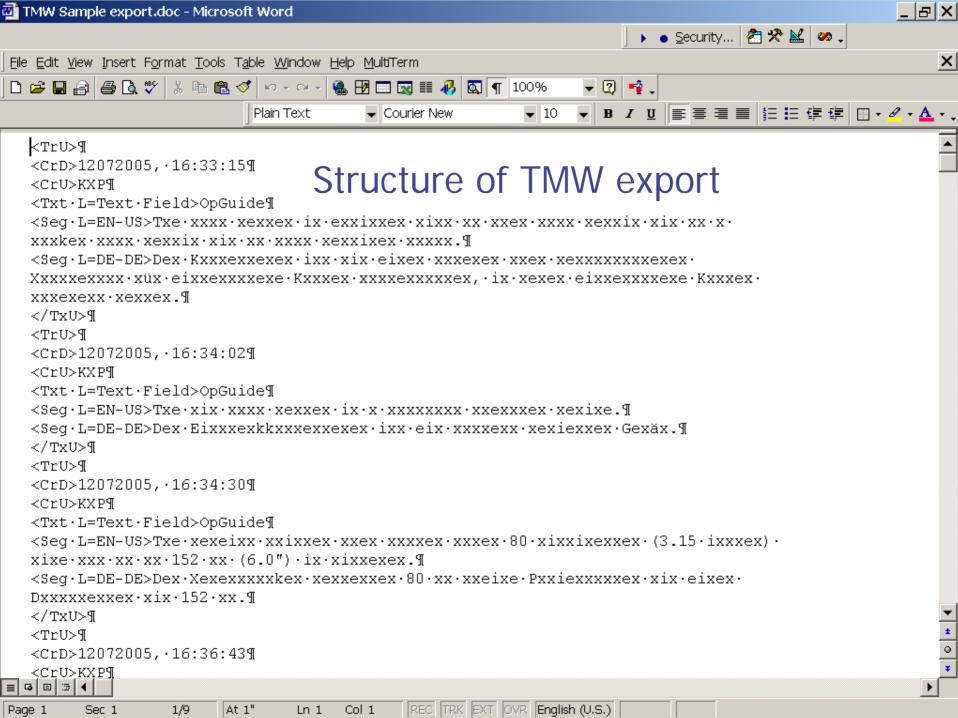




3. Introduction (continued)

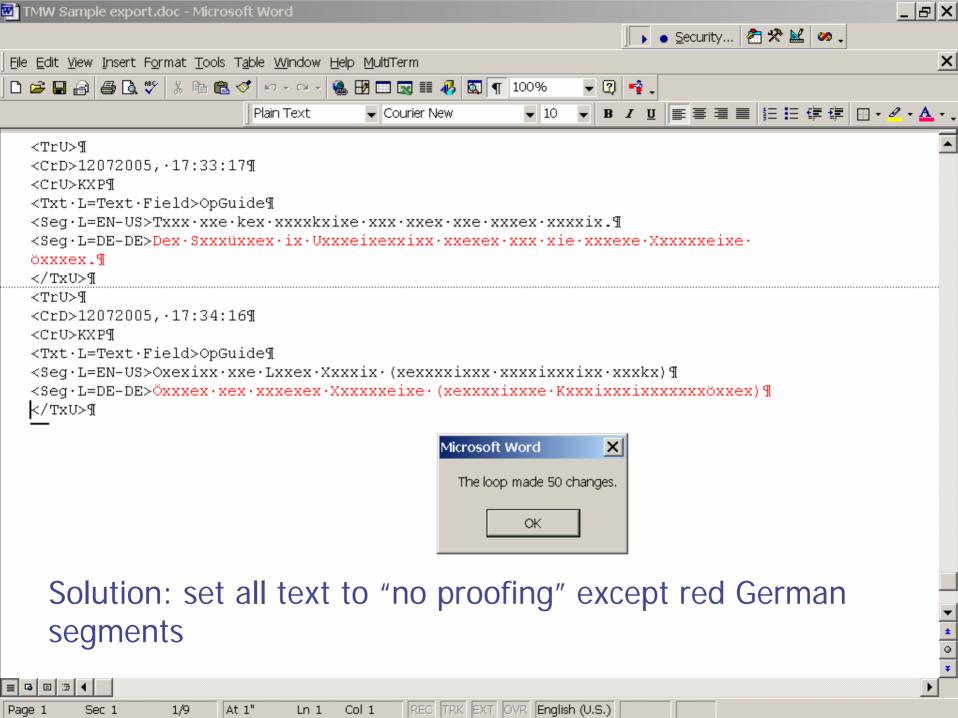
Case Study 2

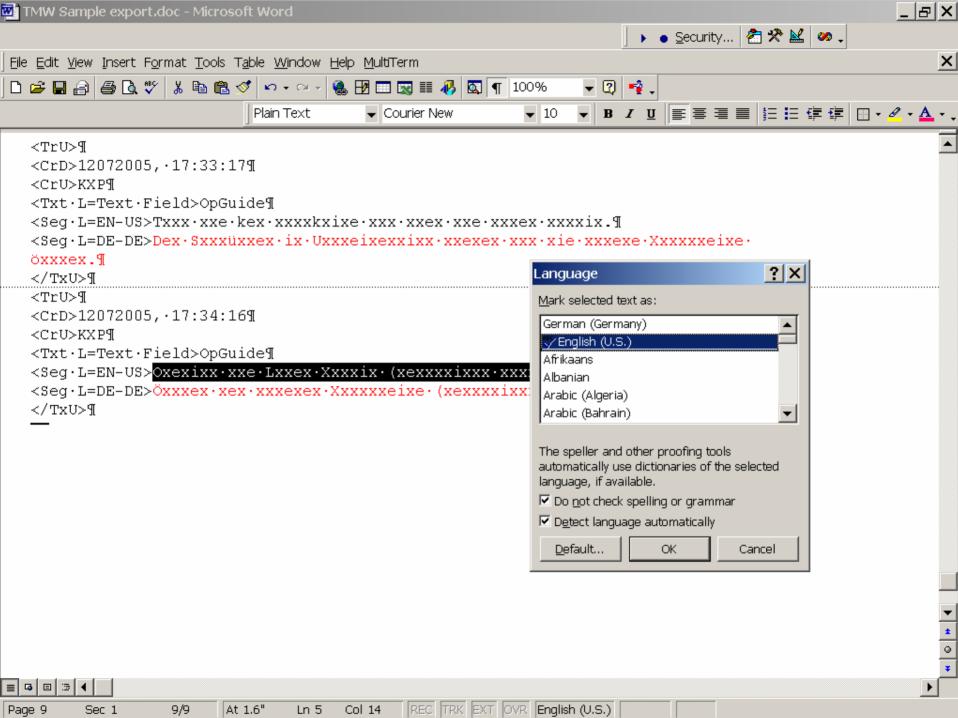
Prepare TMW export for selective edit

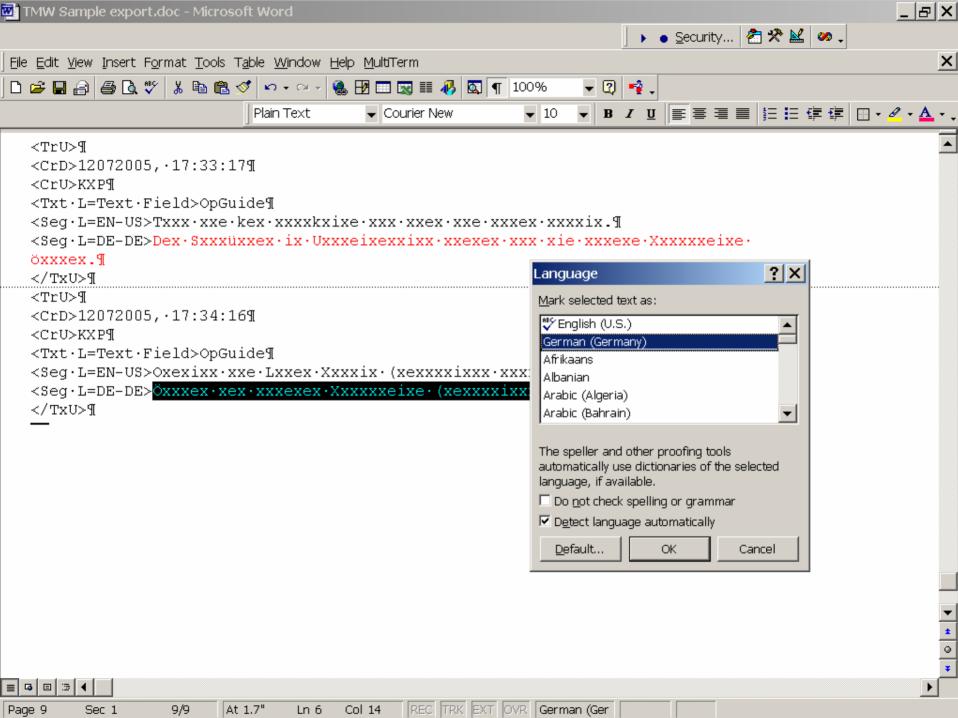


3. Introduction (continued)

Objective:
Distinguish between source and target segments to selectively spell-check target for new German spelling



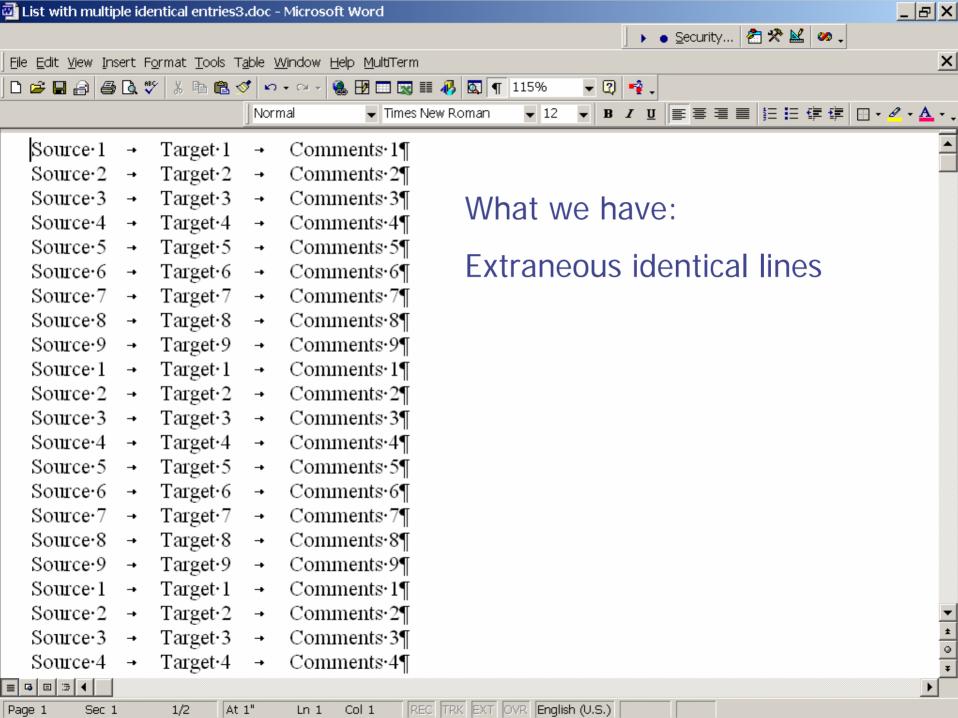


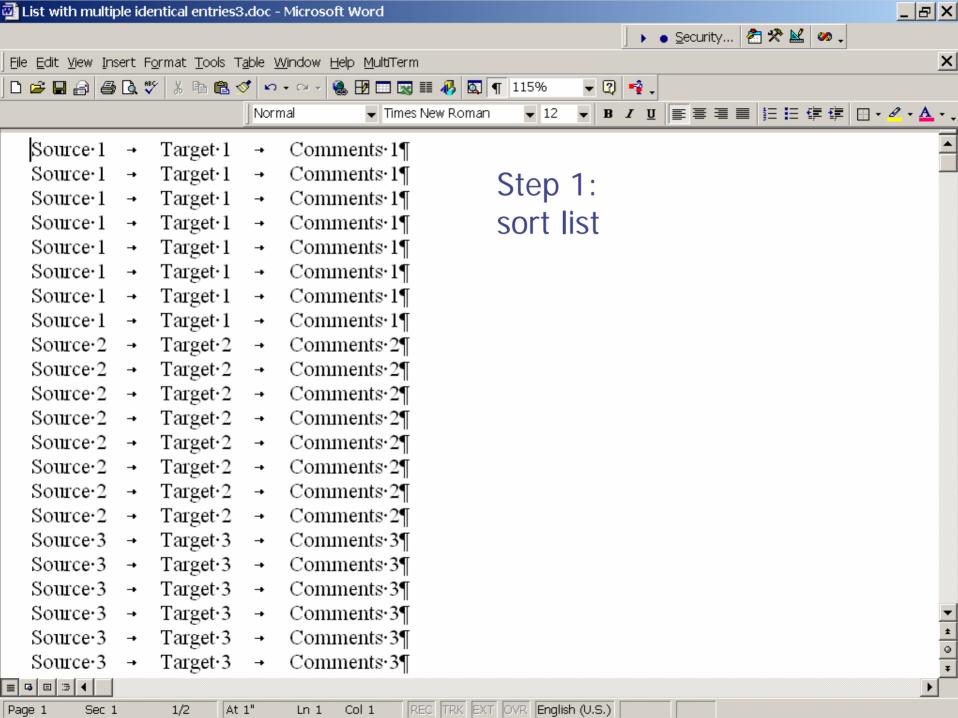


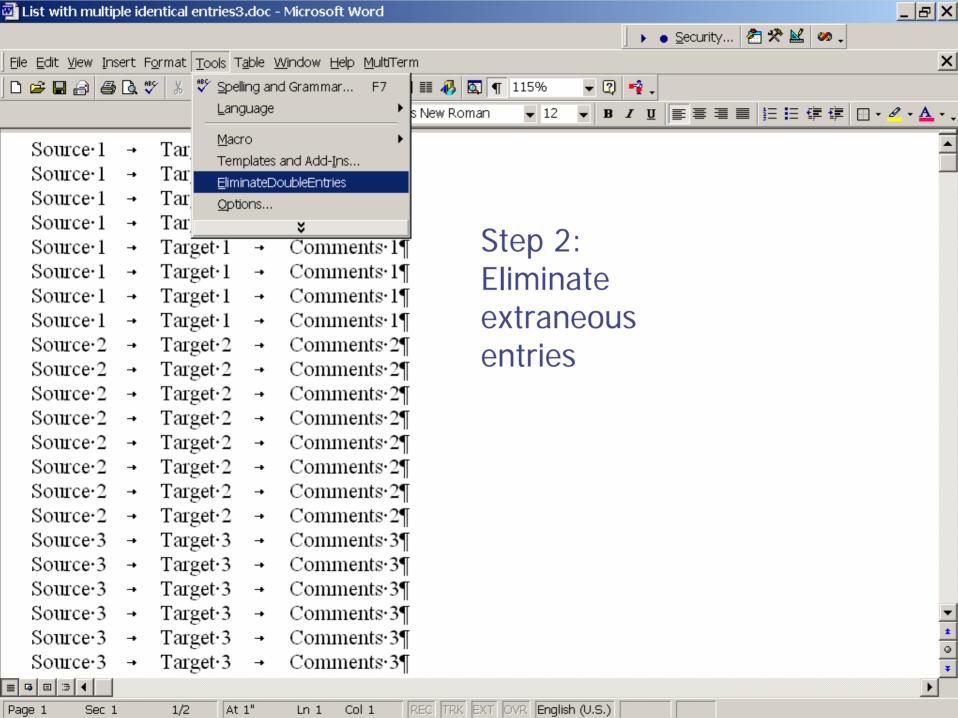
3. Introduction (continued)

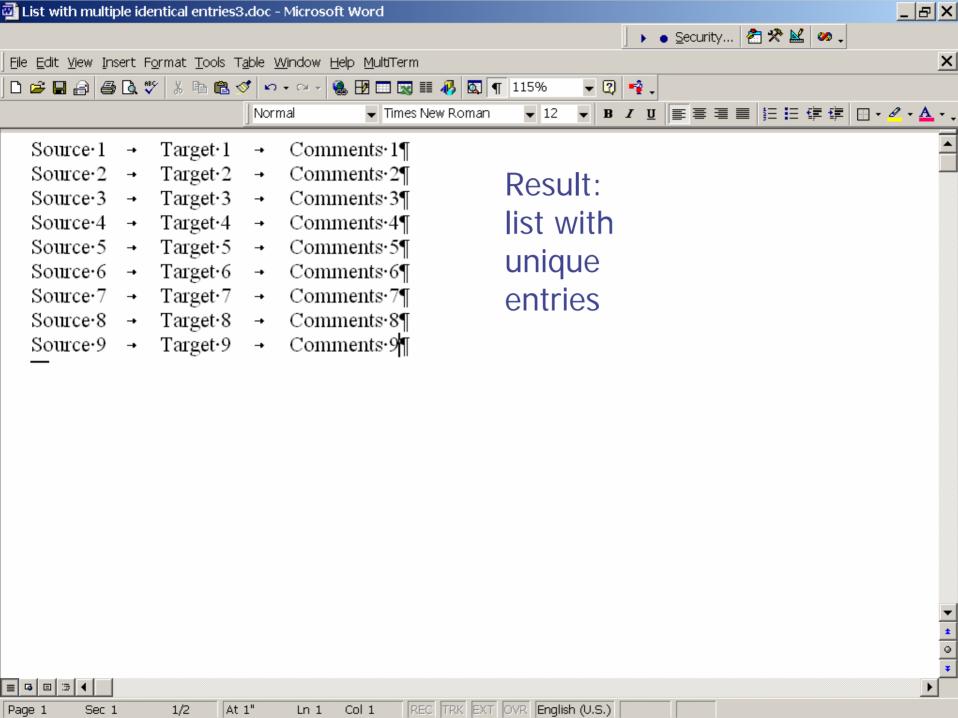
Case Study 3

clean up list with multiple identical entries (e.g. after extracting captions, legends, part names from a technical manual)









4. Other VBA applications for translators

Jost Zetzsche's Toolkit: http://www.internationalwriters.com/toolkit

regularly quotes sources for macros, e.g. ...

http://www.apluscounts.com

little macros for Excel, Word, and PowerPoint that deliver more accurate word counts (including Word text boxes) and automatically calculate a customizable price that you would charge for these texts

- http://www.t4t.cc e.g.
 - utility that automatically converts metric data to imperial data and vice versa right in your Word document
 - macro that performs 10 find & replace runs simultaneously, with one-click convenience

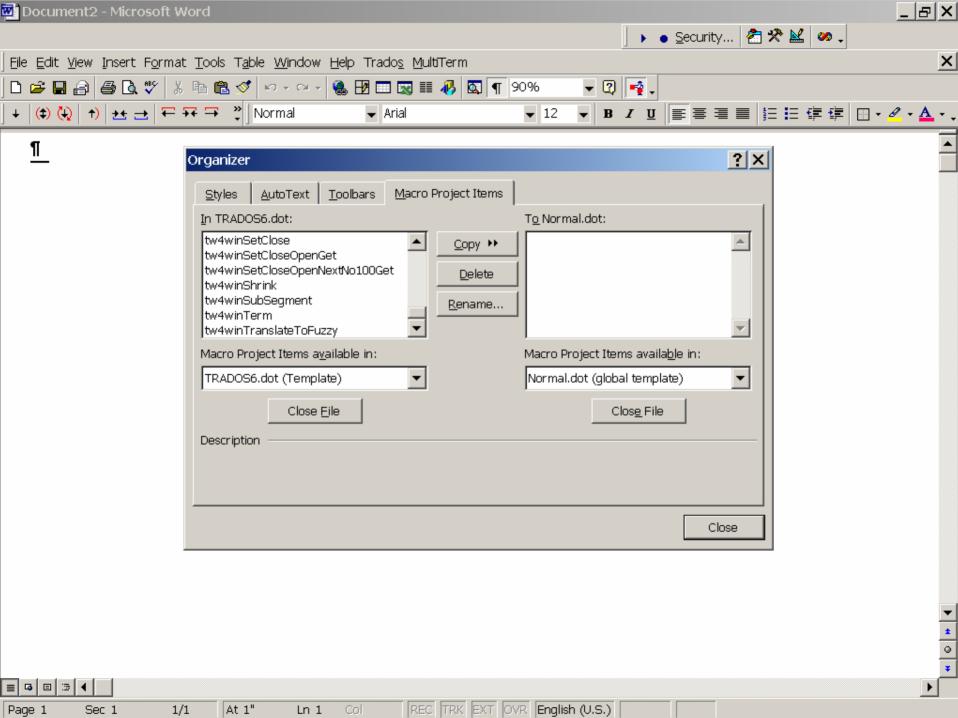
- http://www.openlingua.de/ol/software/tmexports.html
 - a script used for finding all Translation Memories (TM) in a given directory and exporting them using Trados Translators Workbench (TW), while at the same time creating a list of the files with more data about the TMs

- www.trans-k.co.uk/macros.html
 - macros that Change English typographic quotes to German ones, German ones to English ones and English and German typographic ones to straight ones

- http://www.necco.ca/dv/word_macros.htm
 - macro collection for Déjà Vu and Trados users, e.g. paint, hide and change codes

- ... and many more, e.g.
 - www.passolo.com/support/downloadmacros.stm
 - www.proz.com/translation-articles/articles/468/1/How-to-spell-check-your-TRADOS-translation-memories
 - web.ticino.com/multilingual/tools_for_translators.htm
 - atools.dotsrc.org/index.php

- Plus comprehensive TM Tools that are macro-based:
- www.wordfast.org/
- www.wordfisher.com/
- www.metatexis.com/
- ... and Trados



5. Online learning and community

MS VBA Home:

msdn.microsoft.com/isv/technology/vba/default.aspx

- Online Courses:
 - * visualbasic.about.com
 - * www.vbtutor.net

5. Online learning and community

Newsgroups and User groups:

- msdn.microsoft.com/newsgroups/default.aspx?dg=microsoft.public.word.vba.general
- groups.yahoo.com/group/Word_VBA (775 members)
- groups.yahoo.com/group/VBA_Developer (559 members)
- groups.yahoo.com/group/VBA-Developer (809 members)
- groups.google.com/group/VisualBasic4Applications (168 members)
- groups.google.com/group/alt.comp.lang.vba (53 members)
- (all data as of 11-12-2005)

6. Bibliography

- Tim Anderson, Visual Basic in Easy Steps, 2003, ISBN: 0760747881
- Course Technology Staff, Course IIt: Microsoft Word 2002.
 VBA Programming, 2001, ISBN: 0619073489
- Andreas Janka, VBA mit Word, Galileo Press, Bonn 2004 (in excerpts downloadable at www.galileocomputing.de/download/dateien/633/ galileocomputing_vba_word.pdf)
- ♦ John Paul Mueller, VBA for Dummies, 2003, ISBN: 0-7645-3989-2

6.1. Additional useful websites

- word.mvps.org/FAQs/MacrosVBA/index.htm
- wordtips.vitalnews.com/W182_Macros.html
- www.jojo-zawawi.com/code-samples-pages/code-samples.htm
- www.ginstrom.com/software/wordmacros/ (especially for English < > Japanese translators)

Download this complete presentation:

PDF: http://pages.sbcglobal.net/pfeiffer/ATA/Word Macros ATA 2005.pdf

PPS: http://pages.sbcglobal.net/pfeiffer/ATA/Word Macros ATA 2005.pps

(Note: created with PowerPoint 2002 (XP); may be incompatible with versions older than PowerPoint 2000 or Acrobat 5)

Hungry for more?

- NCTA-Workshop in San Francisco January 28, 2006:VBA macros for Word & Excel
- More info: www.ncta.org

