

# **Does Google know better?**

## **Translators and machine translation**

Dr Ignacio Garcia  
University of Western Sydney

## Translation memory (TM)

exact match	accept
fuzzy match	adjust
no match	translate from scratch

## Translation memory (TM)

exact match

accept

fuzzy match

adjust

no match

translate from scratch

feed with machine translation (MT) & postedit

accept

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## Translation memory (TM)

exact match

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**Translating by postediting – is that the way forward?**

Settings - Google Translator Toolkit - Windows Internet Explorer

http://translate.google.com/toolkit/settings?hl=en

File Edit View Favorites Tools Help

Settings - Google Translator Toolkit

Gmail Calendar Documents Web Reader more ▼ garciablog@gmail.com | Settings | Help | Sign out

# Google translator toolkit

## Settings

[General](#) [Editing](#)

**Pre-translation:** When you upload a document into Google Translator Toolkit, Google Translator Toolkit translates each sentence in your document using a combination of previous human translations, machine translation, and source text. By default, Google Translator Toolkit pre-translates each sentence as follows:

- **Exact match translation:** If there are previous human translations of the source sentence, use the best available human translation.
- **Machine translation:** If there is no previous human translation of the source sentence, use the machine generated translation.
- **Source Text:** If there is no previous human translation of the source sentence and machine translation is not available, pre-fill with the untranslated source sentence.

**Most users should not modify this default order.** However, some users may find it easier to type over the source text instead of correcting the machine-generated translation. In such cases, select **Pre-fill with source text instead of machine translation** below.

- Pre-fill with machine translation instead of source text
- Pre-fill with source text instead of machine translation

**Automatically open toolkit:**

- Yes
- No

Done Internet | Protected Mode: Off 100%

Original text:

Translation: English » Spanish 100% complete, 77 words

Octopus correct: Spain wins World Cup moments short of extra time  
July 12th, 2010 | Category: News in Brief | No Comments

Pulpo correcto al pronosticar que España ganaria la Copa Mundial en tiempo extra  
12 de julio de 2010 | Categoría: Noticias en breves| Sin comentarios

Spain has won the World Cup for the first time in it's history, scoring only a single goal in the final against the Netherlands, four minutes from the end of extra-time. Moments before the World Cup was to be decided by a penalty shootout, Barcelona midfielder Andres Iniesta slipped the ball past Dutch goalkeeper Maarten Stekelenburg.

España ha ganado la Copa del Mundo por primera vez en su historia, marcando un solo gol en la final contra los Países Bajos, cuatro minutos antes del final de la prórroga.

Moments before the World Cup was to be decided by a penalty shootout, Barcelona midfielder Andres Iniesta slipped the ball past Dutch goalkeeper Maarten Stekelenburg.

Automatic Translation Search

Custom Translation Search

Translation Search Results  
No previous translations available.

Computer Translation  
Momentos antes de la Copa del Mundo se decidiría por la tanda de penales, centrocampista del Barcelona Andrés Iniesta metió el balón por encima de portero holandés Maarten Stekelenburg.

Use suggestion

Translation editor - Google Translator Toolkit - Windows Internet Explorer

http://translate.google.com/toolkit/workbench?did=00001wcp5f79tds&hl=en

File Edit View Favorites Tools Help

Translation editor - Google Translator Toolkit

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Share Show toolkit Edit View Save Save & Close

Original text: Translation: English » Chinese (Simplified) 15% complete, 181 words

## Royal wedding to boost economy

Britain's **economy** could feel a much-needed cash injection because of **Prince William** and Kate Middleton's upcoming royal wedding. [Skip related content](#)

### Related content

- [Prince William and Kate wedding to fit austere times](#)
- [Video: Royal wedding souvenir industry in overdrive](#)
- [William and Kate 'on cloud nine'](#)
- [Related Hot Topic: Royal Family](#)

[Have your say: Royal Family](#)

Retail analysts are already saying the financial boost could top £600 million.

Huge amounts are set to be spent on wedding souvenirs with some firms already rushing to produce merchandise before the big day.

The couple are due to tie the knot in either spring or summer next year when the eyes of the world will be on the pair as they walk down the aisle.

Retail research expert Neil Saunders said: "We think wedding-related merchandise sales could easily top £26 million in the UK, while food and grocery retailers could cash in to the tune of £360 million as consumers buy extra treats to celebrate the occasion as well as Champagne and wine to toast the happy couple."

## 皇家婚礼刺激经济

英国的经济可能会觉得需要现金注入，因为备受威廉王子和凯特米德尔顿即将推出的皇室婚礼。

[Skip related content](#)

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Done Internet | Protected Mode: Off 100%

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http://translate.google.com/toolkit/workbench?did=00001wejo2cnrpc&hl=en

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跳过相关内容

### 相关内容

- [威廉王子和凯特的婚礼，以适应严峻的时代](#)
- [视频：皇家婚礼纪念品业超速](#)
- [威廉和凯特在云九'](#)
- [相关热点话题：皇室](#)

有你说：[王室](#)

零售分析家们已经说的金融刺激可能突破6亿英镑。大量被设定为婚礼上纪念品一起度过的一些公司已经迫不及待地产生婚礼前一天的商品。

这对夫妻是由于绑在春季或夏季或明年结whene全世界的目光将被视为对他们两人走在过道。

零售研究专家尼尔桑德斯说：“我们认为结婚相关商品的销售上

Internet | Protected Mode: Off 100%



## 1<sup>st</sup> set: 14 participants, 28 tests, ENGLISH > CHINESE

### TIME

**Hypothesis 1:** post-editing is faster than translating from the ST

- marginally supported : 'from MT' faster in 15/28 tests (53.5%)
- two tail  $p = 0.304$  (**not significant**)

### QUALITY

**Hypothesis 2:** post-editing produces poorer quality

- not supported: 'from MT' best in 33/56 tests marked (59%)
- two tail  $p = 0.013$  (**significant**)



The image is a screenshot of a PDF viewer window. The window title bar shows '8 (2 of 16)'. The toolbar includes icons for search, zoom (64.3%), and a search box containing the word 'Find'. The article content is displayed in a white area with a dark sidebar on the left containing icons for home, back, forward, and search. The article title is 'Is machine translation ready yet?' by Ignacio Garcia, University of Western Sydney. The abstract discusses the Google Translator Toolkit (GTT) and its default option of pre-filling with machine translation. The keywords are: machine translation, translation memory, web-based translation, translation quality, post-editing, proofreading machine translation. The article is divided into sections, with '1. Introduction' being the first. The introduction discusses new translation memory tools and the Google Translator Toolkit (GTT). The article concludes by examining what translators should make of this offer, discussing the results of tests in which fourteen translator trainees used GTT to translate passages working from a machine-translated version and from the source text alone. The outcomes were gauged according to the time taken, and the quality of the translation.

Is machine translation ready yet?

Ignacio Garcia  
University of Western Sydney

The default option of the Google Translator Toolkit (GTT), released in June 2009, is to “pre-fill with machine translation” all segments for which a ‘no match’ has been returned by the memories, while the *Settings* window clearly advises that “[m]ost users should not modify this”. To confirm whether this approach indeed benefits translators and translation quality, we designed and performed tests whereby trainee translators used the GTT to translate passages from English into Chinese either entirely from the source text, or after seeding of empty segments by the Google Translate engine as recommended. The translations were timed, and their quality assessed by independent experienced markers following Australian NAATI test criteria. Our results show that, while time differences were not significant, the machine translation seeded passages were more favourably assessed by the markers in thirty three of fifty six cases. This indicates that, at least for certain tasks and language combinations — and against the received wisdom of translation professionals and translator trainers — translating by proofreading machine translation may be advantageous.

**Keywords:** machine translation, translation memory, web-based translation, translation quality, post-editing, proofreading machine translation

### 1. Introduction

New translation memory tools and new versions of established ones offer translators the option to post-edit machine generated text for segments lacking any matches in the memories. The Google Translator Toolkit (GTT), released in June 2009, goes a step further by offering this as its default option, clearly indicating in its *Settings* window that “[m]ost users should not modify this”.

This article examines what translators should make of this offer, discussing the results of tests in which fourteen translator trainees used GTT to translate passages working from a machine-translated version and from the source text alone. The outcomes were gauged according to the time taken, and the quality of the

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- not supported: 'from MT' best in 33/56 tests marked (59%)
- two tail  $p= 0.013$  (**significant**)

## 2<sup>nd</sup> set: 14 participants, 28 tests, ENGLISH > CHINESE

### TIME

**Hypothesis 1:** post-editing is faster than translating from the ST

- not supported: 'from MT' faster in 14/28 tests (50%)
- two tail  $p= 0.492$

### QUALITY

**Hypothesis 2:** post-editing produces poorer quality

- not supported: 'from MT' best in 40/56 tests marked (71%)
- two tail  $p= 0.009$  (marker 1),  $0.037$  (marker 2) (**highly significant**)

**3<sup>rd</sup> set: 21 participants, 42 tests, CHINESE > ENGLISH**

## **TIME**

**Hypothesis 1:** post-editing is faster than translating from the ST

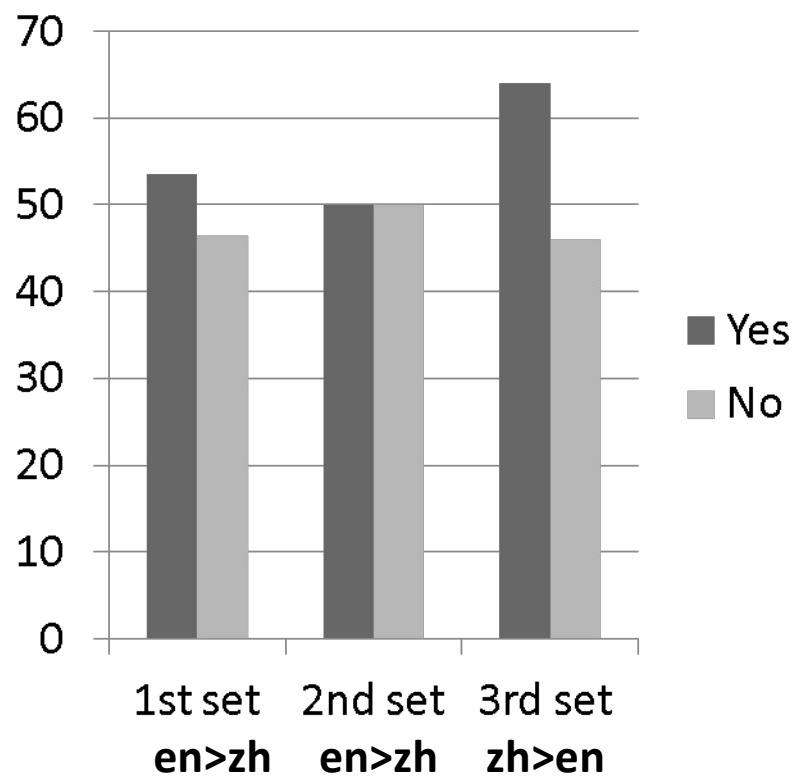
- supported : 'from MT' faster in 27/42 tests (64%)
- two tail  $p= 0.0042$  (**significant**)

## **QUALITY**

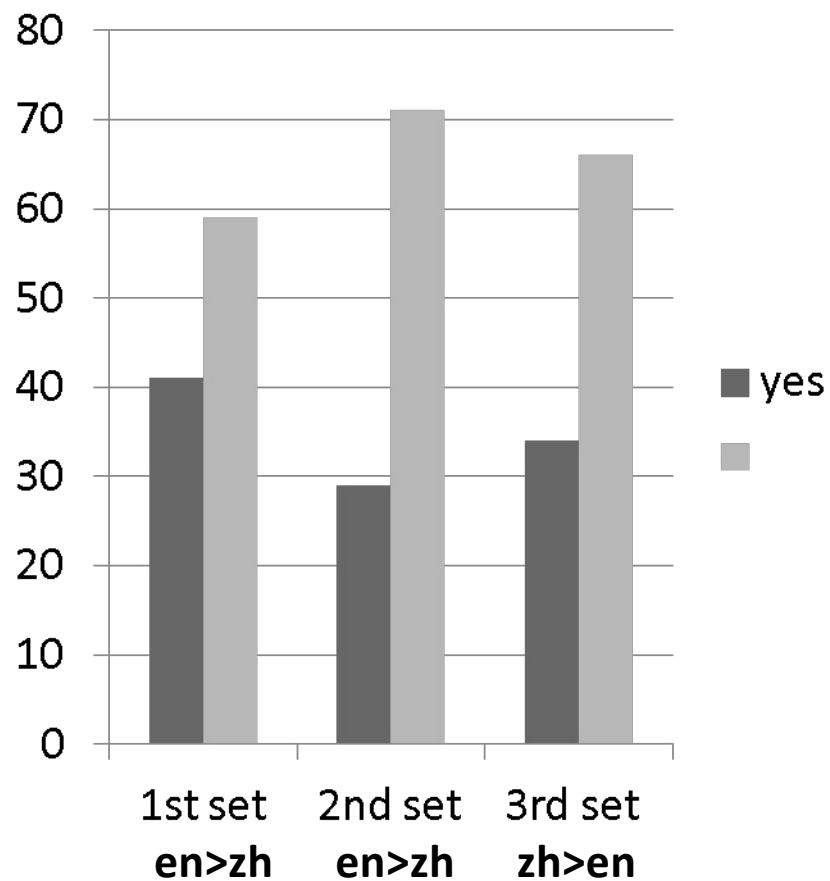
**Hypothesis 2:** post-editing produces poorer quality

- not supported: 'from MT' best in 28/42 tests marked (66%)
- two tail  $p= 0.0022$  (**significant**)

### Postediting is faster



### Postediting quality is worse



## **Findings**

Post-editing may be faster, but just marginally faster

Post-editing produces better quality (not worse)

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## **Limitations**

only one language pair (CH-EN)

only one text type (general)

non professionals doing non-professional translation

## Findings

Post-editing may be faster, but just marginally faster

Post-editing produces better quality (not worse)

## Limitations

only one language pair (CH-EN)

only one text type (general)

non professionals doing non-professional translation

## Relevance

results *add new information*

results are likely to apply

- to closer related language pairs
- as MT improves