

SESSION5: HCI

“Intercultural Collaboration Experiments 2002”

Towards Intercultural Communityware

Toru Ishida

Department of Social Informatics
Kyoto University

Digital City Kyoto



Since 1998

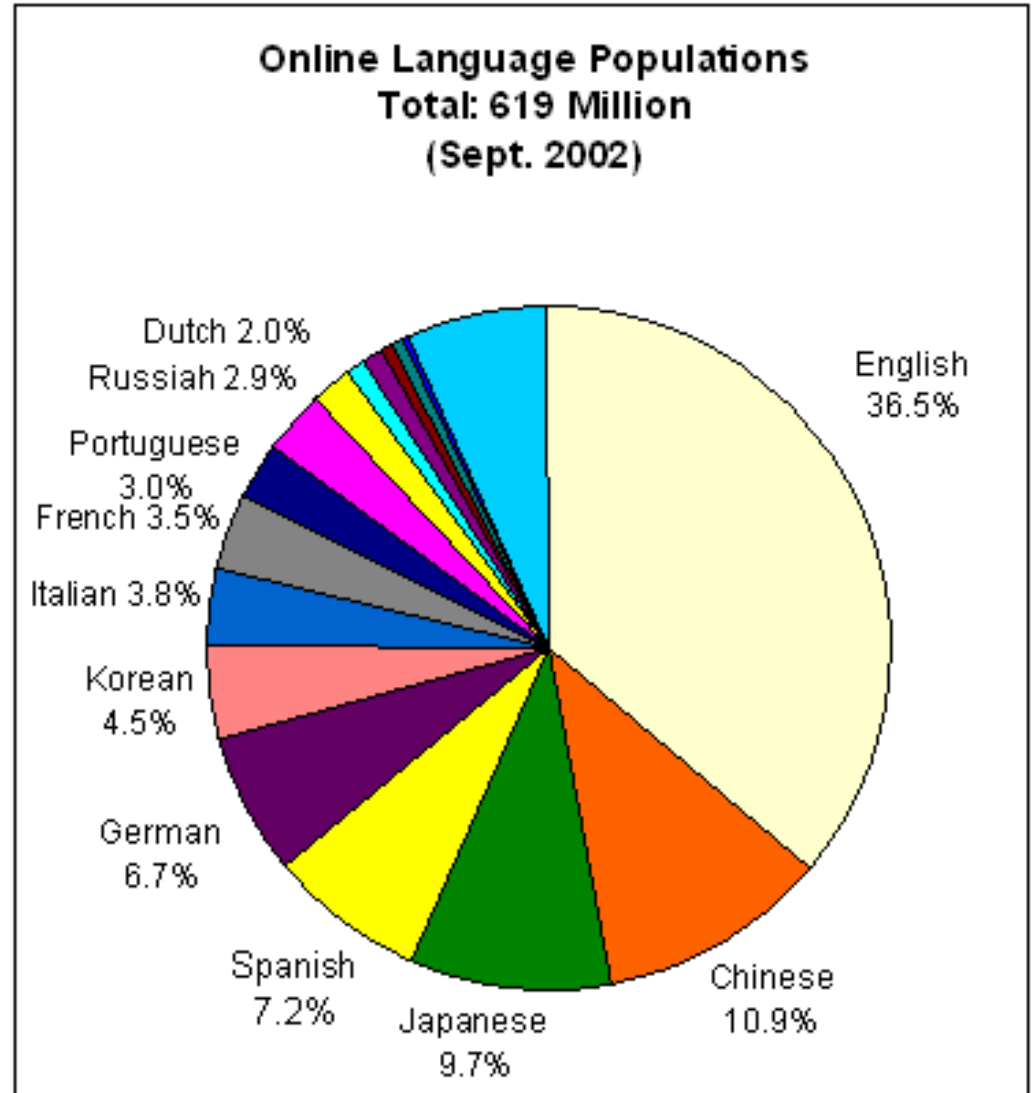


Intercultural Communication

Since 2002

1. Background

- Asian Internet population will surpass the US and Europe in 2003



Source: Global Reach (global-reach.biz/globstats)

1. Background

- Global collaboration is ongoing in English speaking countries
- European Union encourages Europe wide projects
- But.... a **serious language barrier** exists in Asian countries
 - Asian people do not learn neighboring languages.
 - Asian people want to make documents in their mother languages

2. Experiments

Intercultural Collaboration Experiment 2002

- To develop open source software in Asian countries in our MOTHER languages!
 - Shanghai JiaoTong University (China)
 - Seoul National University, Hanyang University (Korea)
 - University of Malaysia (Malaysia)
 - Kyoto University (Japan)
- Team members never see in person, and complete software with multilingual Communication tools: **TransWEB** and **TransBBS**.
- April-June 2002: Software Design
- October-December 2002: Software Integration
- Goal: To understand issues in a multilingual project.

2. Experiments

- Each country develops a multilingual tool
- Japan: TransGroupware
- Malaysia: TransSMS
- China: TransSearch
- Korea: TransChat



3. Observation

- Low translation quality

apana-82 || 投稿者: calvin sheng || [document](#)

Subject: 翻译效果好象不太好啊

投稿日時: 2002年05月21日 火曜日 12時54分08秒



日本語(retranslate)	英語(retranslate)	中国語	韓国語(retranslate)
翻訳した内容(は私 はあまりわからない ことを見る	The content translation comes out I see to don't quite know	翻译出来 的内容我 看不太懂	번역한 는 그 것을 본

3. Observation

- Adaptation emerged...
 - when writing
 - Repair translation again and again before posting
 - when reading
 - Browse multiple languages on TransBBS

jpana-149 || 投稿者: FUJISHIRO Yoshiyuki || [document](#)

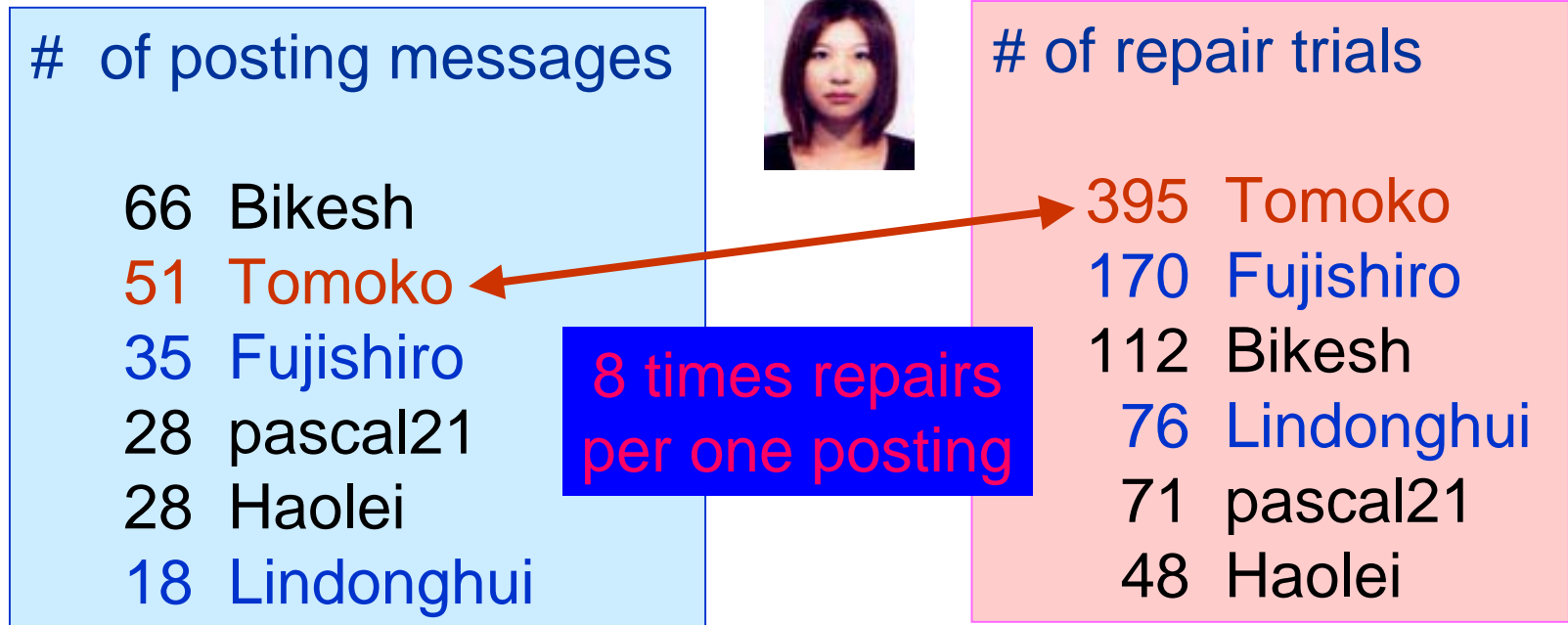
subject: We want to know whether you got my message(jpana-148)

稿日時: 2002年05月23日 木曜日 13時58分42秒



本語	英語(retranslate)	中国語(retranslate)	韓国語(retranslate)	Malay(retranslate)
あなたが私の投稿(jpana-148)を理解できたかどうかを私たちは知りたい。あなたが理解した部分をお返しの言語を	We want to know whether you could understand the my contribution jpana-148 or not. We, please contribute	你能理解与否我的投稿(jpana-148)我们想知道。你理解的部分使用你的语言请	당신이 나의 투고(jpana-148)을 이해할 수 있었던 것인가 아닌가를 우리들은 알고 싶다. 당신이 이해한 부분	Kami h whether dapat t jpana- saya, o contrib

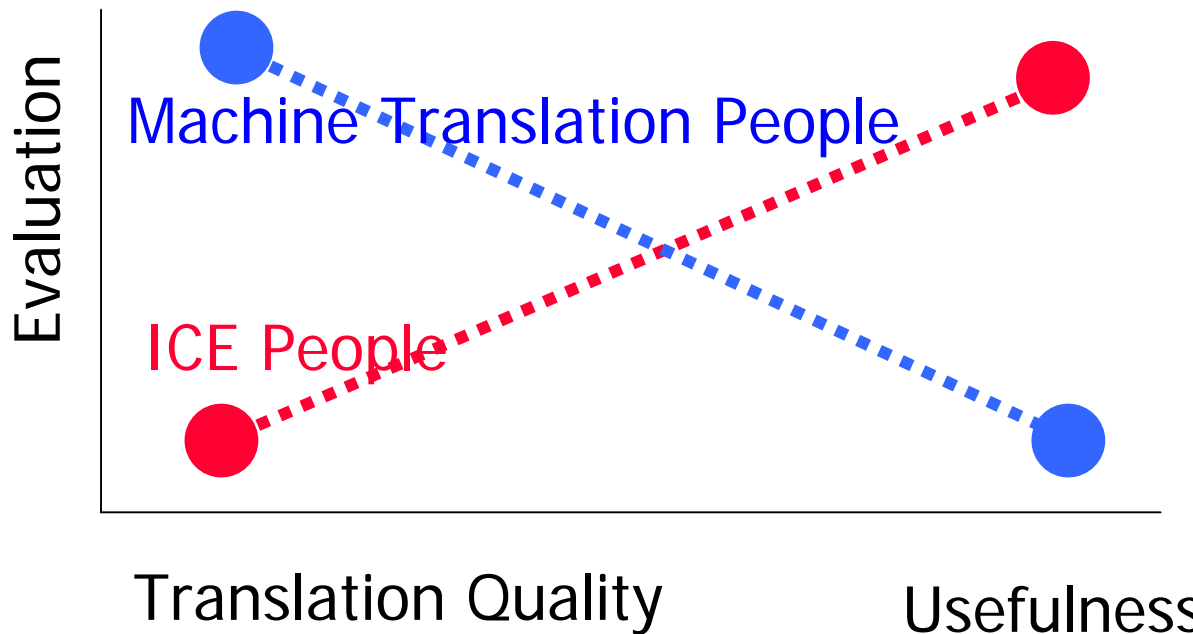
How many times do participants try to *Repair* before posting?



Data on TransBBS from Oct 10th to 30th

3. Observation

- We feel machine translation is terrible, but useful!



- But why?.... probably because we use machine translation in the context of collaboration.

3. Observation

- Collaboration emerged...

- To overcome translation errors
- Technical discussions succeeded in spite of poor translation quality

Date Posted: Monday, June 3, 2002 13:39:33

Japanese(retranslate)	English	Chinese(retranslate)	Korean(retranslate)	Malay(retranslate)
横断は、attachment..will that 翻訳 また、もしメールの持ち意志、内容翻訳のについて、および持たせているよいidea.Butですか？	Transmail is a good idea. But how will the content be translated and if the mail has an attachment..will that be translated too?	Transmail是一个好主意。但是如何将内容被翻译和如果邮件有一份附件。。也被翻译的意愿？	메일 횡단은, attachment.. will that 번역 또이어서, 만약 메일의 가짐 의 지내용번역의에 대해서, 미처 갖게 하고 있는 좋은 idea. But 입니까?	Transmail ada suatu cadang. Tetapi diterje bagaimana ak kandungan da surat mampu suatu lampira yang diterjem juga?

japana-254 || Posted by: FUJISHIRO Yoshiyuki || document

Subject:

Date Posted: Monday, June 3, 2002 19:53:43

Japanese	English(retranslate)	Chinese(retranslate)
Re: malay-252. 添付ファイルは翻訳されないうしょう。なぜなら、それは非常に難しいからです。	Re : malay-252. The appending file will not be translated. Because it is very difficult.	Re: malay-252. 附加文件不被翻译吧。要是为何。非常难。



japana-272 || Posted by: Won Je Yang || document

Subject:

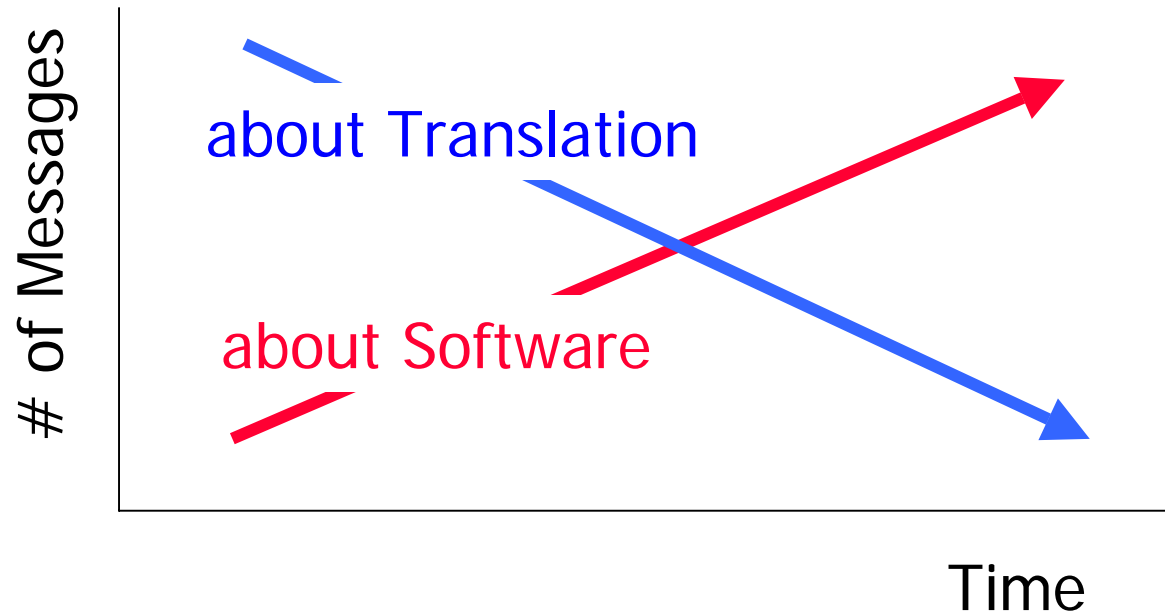
Date Posted: Wednesday, June 5, 2002 16:02:57

Japanese(retranslate)	English(retranslate)	Chinese(retranslate)	Korean
TransMailの場合 貼付ファイルの問題は そのように(そんなに)重要に見られるか しませんね。SMTPを経る前に Wrapper役割をして くれるserverを経たら十分に可能だと 思います。	You can be seen or there is not a problem of the sticking file in the case of TransMail importantly like this (so). It sees that will be possible sufficiently if passing through server to raise by playing Wrapper role to pass	TransMai机動警察右粘貼文件疑问制那样(那样)重要河事是波特不有。经过SMTP前相暴的多面充分地可能下吏la#发啦 Wrapper作用乙亥焦耳server.	Trans 철부 피 는 그렇 게 보이 요. SM 기 전 어 역할은 server 면 출 는 리라 는



3. Observation

- Collaboration on translation to collaboration of software development.

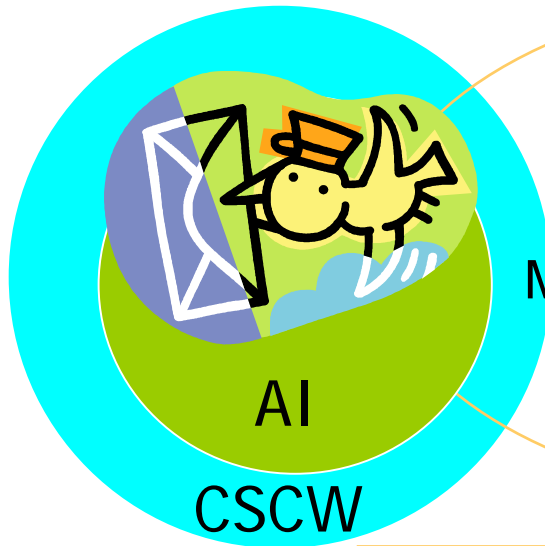


- We do not have time to create a corpus! Need to develop project ontology.

4. Towards intercultural communityware

- Realize a translation agent
 - ... as a social entity in a multilingual project

Saeko



Saeko **requests** you to
“**Upload the software
development document
to the Web.**”

Maybe you should do this
quickly. Japanese
people want to do
everything in time.



Bikesh

4. Towards intercultural communityware

- To support collaborative translation to overcome translation errors.
 - *Project ontology*
- To design protocols for participants to achieve communication even if they use noisy media.
 - *Collaboration ontology*

5. Conclusion

- Bringing AI and CSCW together
 - Machine translation is an achievement of AI
 - Intercultural collaboration is the major issues of CSCW
- Future Research
 - ICE2003: Collaborative development of translation agents.
 - 2005: Multilingual collaboration tools for Asian people to freely create joint projects.
 - 2007: Project grounded translation agents.

Thank you!

Intercultural **C**ollaboration **E**xperiment
ICE 2002

<http://ice2002.kuis.kyoto-u.ac.jp/ice2002/>

