Overview of LIG Activities in NLP

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University Joseph Fourier (Grenoble 1) Laboratory of Informatics of Grenoble (LIG) GETALP team





Overview

- *** Where I come from**
- 🖈 Who I am
- ***** Evaluation

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- Translation/Post-edition Quality
- -Language Level
- Research Field

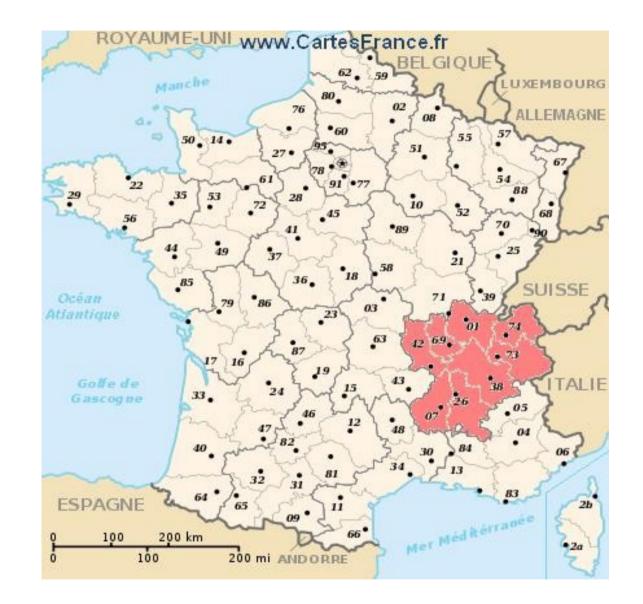
Where I come from Who I am Evaluation Research Field





Where I come from Who I am Evaluation Research Field 05/12/2011 3/46





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University Joseph Fourier (Grenoble 1)

* Located in the middle of the Rhône-Alpes region

2nd French region in terms of research activities

19,100 students

1,400 doctoral students, 300 theses submitted / year

- * 1,400 lecturers and researchers, 70 labs
- * High density of multinational firms in fields such as nano and micro-electronics, biotechnologies and ICT

ST microelectronics, Hewlett-Packard, Becton Dickinson, Schneider Electric, Roche Diagnostics, BioMerieux, **Xerox RCE**

Many national and international research centers represented

CNRS, INRIA, CEA, ESRF, ILL



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Laboratory of Informatics of Grenoble

★ LIG

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* Since 2007

- Assemble a critical mass to make scientific contributions to the emerging grand challenges in informatics.
- Create an international reference for informatics research
- LIG : 165 academic and research members, 260 doctoral and post-doctoral students, 65 support staff

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LIG Scientific project : Ambient Computing

Contributions to fundamental concepts, models and algorithms for

- multi-scale infrastructures, systems and environments
- with autonomous, adaptable and evolutionary behavior in an heterogeneous, open and dynamic universe
- open to all forms of interaction
- with guarantees of quality: speed, reliability, security...

 Research strongly related to an engineering activity of growing societal importance
 Sustainable IT, Green IT



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GETALP: Study Group for Speech and Natural Language Translation/Processing

3 Professors : H. Blanchon, C. Boitet & L. Besacier

12 academic and research members / 13 PhD

Research Topics

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- 1. Machine Translation (MT) and Computer-Aided Translation (CAT)
- 2. Automatic Recognition of Speech, Speakers and Sounds
- 3. Lexical Resources, Evaluation and Corpora (software and content)
- 4. Dialogue, Communication and Emotions (& more: Affect)
- 5. Specialized Programming Languages and Environments for NLP

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GETALP: Study Group for Speech and Natural Language Translation/Processing

> 3 Professors : H. Blanchon, C. Boitet & L. Besacier 12 academic and research members / 13 PhD

Activities around these research topics share five challenges:

- 1. make computer applications multilingual and "ubilingual"
- 2. computerize under-resourced and rarely written languages by adapting existing resources
- 3. make language-based communication multimodal (text, speech, gestures)
- 4. propose and implement task-related evaluation methods and tools.
- 5. use contributive interaction to collect resources, improve translations, and communicate with "guaranteed meaning"

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05/12/2011

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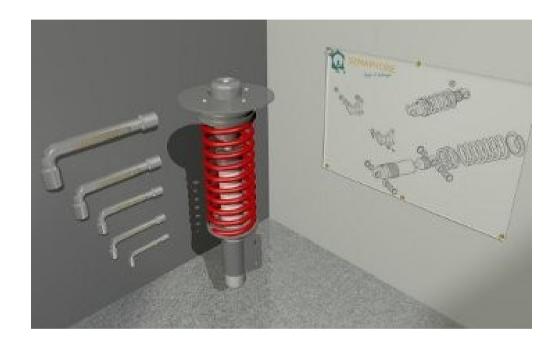




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16/46

Technical Documentation



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1993-1994 COGEMA Pierrelatte





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2001-2003 Sémaphore 3D

2004 – ... GETALP

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Computational Linguist

VOICE & SCRIPT INTERNATIONAL, Londres, Angleterre

Translator/Proof-reader – subtitling, dubbing

*** GRIL, Clermont-ferrand, France**

PhD Students – Generic Checker of Controlled Languages, applied to Simplifed English

Sémaphore Langues & Technique, Vichy, France

Post-editor/ roof-reader / project manager

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Service des Langues, UJF, Grenoble, France

Associate professor – Technical English and TIC

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Overview

- Where I come from
- * Who I am
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05/12/2011

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Evaluation Standards

Translation	Adequacy	Fluency		
IWSLT07_TEST_463-spk24_3\Where is the lavatory ?	$\begin{array}{c} \circ \circ \circ \circ \circ \circ \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$	$\begin{array}{c} \circ \circ \circ \circ \circ \circ \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$		
IWSLT07_TEST_463\Where's the toilet?	$\begin{array}{c} \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$			
IWSLT07_AE_TEST_463\Where is the lavatory ?	$\begin{array}{c} \circ \circ \circ \circ \circ \circ \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$	$\begin{array}{c} \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$		
Annotator: cam Task: IWSLT07 Arabic English ASR NIST		Annotate		
Instructions	5= All Meaning 4= Most Meaning 3= Much5= Flawless English 4= Good English 			

Figure 1 An example of the adequacy/fluency metric for the Arabic task.

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Evaluation Standards

Translation	Rank				
IWSLT07_CE_TEST_159\Can you mail this mail address ?	○ 1 Worst	0 2	0 3	0 4	O 5 Best
Will this e mail mail ?	0 1 Worst	0 2	0 3	0 4	O 5 Best
IWSLT07_CE_TEST_159\Can you accept mail this mail address ?	O 1 Worst	0 2	0 3	0 4	O 5 Best
IWSLT07_TEST_159\This address E mail, will you accept mail.	0 1 Worst	0 2	0 3	0 4	
IWSLT07_CE_TEST_159\Can you mail this e-mail ?	○ 1 Worst	0 2	0 3	0 4	O 5 Best
Annotator: cam Task: IWSLT07 Chinese English Clean				A	nnotate

Figure 2 An example of the ranking metric for the Chinese Clean task.

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- Where I come from
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05/12/2011

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- Language Level
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Context

* **MT**

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- * High quality translation
- * Post-editing

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Aims

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Corpus ☆

- MT evaluation metrics
- Interactive MT
- Confidence measure MT

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Baseline SMT

- * Phrase-based system
- * Log-linear model

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* 14 weighted features

Translation Hypothesis
 Professional translation reference

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Post-edition

* 10,881 sentences

- Translation hypothesis
- Corrected hypothesis
- Reference translation

* 1,500 sentences

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Post-edition of reference translation

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Mechanical Turk

- Effectiveness
- Ethical, social and economic aspect
- Guidelines of good practice
 - * Non-profit organization
 - * Free for community
 - * Context

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* Decent remuneration...

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Mechanical Turk Interface

Preview HITs	🕲 Select HT Temptate 🔘 Upload input Date 🌖	Preview Confirm and Publi
This is how your HIT will look to workers. Make sure that any variables in the HIT are o Collect Post-edits_US	onectly replaced by your input data, then click "Next".	
For bench speakers only] Correct english sentence for \$0.15		
Requester: besacler Qualifications Required: HIT approval rate (%) greater than DD, Location is UNITED STA	Reward: \$0.15 per HIT HIT's available: 4035 TES	Duration: 20 Minutes
	NIT Preview	
Correct E	nglish translations	2
To learn more about us and why this data collect		
The instructions are given on this link : <u>INSTRUC</u>		
Read Carrently the Instru	ctions before beginning with this HIT:	
Phrase source :		
Il bâtit alors sa fortune dans l'expansion immobilière.	Traduction à corriger	
inmobiliere.	Then he built his fortune in the boom in property.	
Traduction automatique :		
Then he built his fortune in the boom in property.		
Previous RIT	Showing HIT 3 of 4035 Next HI	
	Select a Di	lerent input File Next
	reers at Amazon Developers Press Policies	
62005-2010	Amazon.com, Inc. or its Atiliates	An amazon.com co
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Mechanical Turk Instructions

★ Task

- correct English translations of French sentences.
- Each translation
 - checked
 - corrected
- Correct translation
 - syntactically acceptable
 - conveys the French sentence meaning
- Minimize the corrections

* Translation as close as possible to the French sentence

* All French sentence concepts in the translation.

Rejection

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Figures

- * 12,381 translated sentences
 * 4 months
 * \$2,040
 - \$1,855 for Workers
 - \$185 for MTurk fees
- * 553 people
- * 70% helped
- 2/3 chances to be dismissed
- * 60 post-editions / Mturker
- * 62% of participants less than 10 posteditions
- * six contributors more than 500 validated sentences
- Where I come from Who I am Evaluation Research Field 05/12/2011 30/46



*Post-edition quality/Translation hypothesis

- Better
- Equivalent
- Worse

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*Post-edition quality

Ok

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- Unsignificant mistake Careless mistake,
- Minor mistake
- Significant error
- Serious error





* Improve: 87.1%* Equivalent : 12.5%

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* Perfectly good: 64%* Serious or Significant errors:19%

* Professional Quality : 94%

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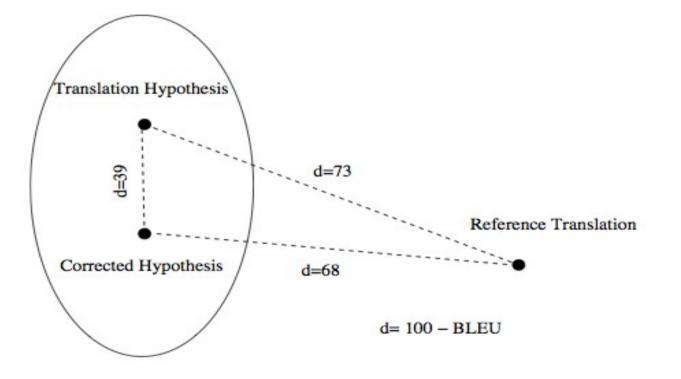
Post-edition	ok	Unsignificant	Minor	Significant	Serious	Total (%)
judgment		mistake	mistake	error	error	
Better	189	13	20	42	8	271 (87.1%)
Equivalent	10	11	9	0	0	39(12.5%)
Worse	0	1	0	0	0	1 (0.3%)
Total	199	25	29	51	8	311
%	64.0	8.0	9.3	16.4	2.6	

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Corpus characteristics



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Corpus characteristics

Corpus	Type of compared translations	BLEU Score	
10001	Handlaria for Deferring	07.00	
corpus-10881	Hypothesis & Reference	27,03	
	Hypothesis & Corrected Hypothesis	61,41	
	Corrected Hypothesis & Reference	32,20	
corpus-1500	Hypothesis & Reference	29,48	
-	Hypothesis & Corrected Hypothesis	65,10	
	Corrected Hypothesis & Reference	36,96	
	Reference & Corrected Reference	71,90	
	Corrected Hypothesis & Corrected Reference	43,40	



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Corpus examples

Source Sentence	Translation Hypothesis	Corrected Hypothesis
• La police anti-émeutes les ont	• The anti-riot police were immedi-	• The Anti-riot policemen were
aussitôt encerclés et sont inter-	ately surrounded and spoke blunty,	immediately surrounded them
venus sans ménagement, jetant	several of them on land.	and spoke blunty stepped in
plusieurs d'entre eux à terre.		ruthlessly, throwing several of
		them on land to the ground.
• Le cinquième candidat affirme	• The fifth candidate says it sup-	• The fifth candidate says it he
ne soutenir ni le pouvoir, ni	port nor the current leadership,	support nor neither the current
l'opposition.	nor the opposition.	leadership, nor the opposition.
• Forte mobilisation à Copenhague	• Strong involvement in Copenh-	• Strong involvement mobiliza-
et à travers le mode, pour le climat.	ague and in the world climate.	$tion$ in Copenhague and $\frac{1}{2}$ across
		the world for the climate.
•Il y a des rivières qui s'assèchent	• There are rivers are drying up in	• There are rivers are drying up
en Afrique, des cours d'eau où l'on	Africa, rivers where you can walk	in Africa, rivers watercourses
peut marcher comme on ne l'avait	as it had never done before.	where you one can walk as it had
jamais fait avant.		never done before.



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Corpus examples

Source Sentence	Reference Translation	Corrected Reference
• Mais une fiscalité insuffisante	• Too little taxation can do the	• But Too little an insufficient
peut également produire les mêmes	same.	taxation can $also$ do $have$ the
effets.		same effects.
• Le malaise français n'a cer-	• The French malaise has nothing	• The French malaise has
tainement pas été induit par ces	to do with any of them.	nothing to do with was certainly
réformes.		not induced by any of them
		these reforms.
• Mais quelle est la signification	• But what do solidarity and sub-	 But what do solidarity and
réelle de ces deux principes ?	sidiarity really mean?	subsidiarity really mean is the
		real meaning of these two
		principles ?
• Les traités européens expriment	\bullet In the European Treaties, we find	• In The european treaties we
clairement cette subsidiarité verti-	a clear expression of vertical sub-	find a clear expression of clearly
cale.	sidiarity.	express this vertical subsidiarity.



Where I come from Who I am Evaluation Research Field 05/12/2011 38/46



Overview

- Where I come from
- * Who I am
- *** Evaluation**

05/12/2011

- Translation/Post-edition Quality
- -Language Level
- Research Field

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39/46

CEFR

Global scale

ıt User	C2	Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
Proficient User	CI	Can understand a wide range of demanding, longer texts, and recognise implicit mean- ing. Can express him/herself fluently and spontaneously without much obvious search- ing for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
Independent User	B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
Independ	B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics, which are familiar, or of personal interest. Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans.
Basic User	A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
Basi	A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.



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Self-assessment grid



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	Recep	tion	Interacti	on	Produ	ction	
	Listening	Reading	Spoken Interaction	Written Interaction	Spoken Production		roduction
C2	I have no difficulty in understanding any kind of spoken language, whether live or broadcast, even when delivered at fast native speed, provided I have some time to get familiar with the accent.	I can read with ense virtually all forms of the written language, including abstract, structurally or linguistically complex texts such as manuals, specialised articles and literary works.	I can take part effortlessly in any conversation or discussion and have a good familiarity with idiomatic expressions and colloquialisms. I can express myself fluently and convey finer shades of meaning precisely. If I do have a problem I can backtrack and restructure around the difficulty so smoothly that other people are hardly aware of it.	I can express myself with clarity and precision, relating to the addressee	I can present a clear, smoothly-flowing description or argument in a style appropriate to the coentext and with an effective logical structure which helps the recipient 6 notice and remember significant points.	I can write clear, smoothly flowing text in an appropriate style. I can write complex letters, reports or articles, which present a case with an effective logical stueture, which helps the recipient to notice and remember significant points. I can write summaries and reviews of professional or literary works.	
CI	I can understand extended speech even when it is not clearly structured and when relationships are only implied and not signalled explicitly. I can understand television programmes and films without too much effort.	I can understand long and complex factual and literary texts, appreciating distinctions of style. I can understand specialised articles and longer technical instructions, even when they do not relate to my field.	I can express myself fluently and spontaneously without much obvious searching for expressions. I can use language flexibly and effectively for social and professional purposes. I can formulate ideas and opinions with precision and relate my contribution skilfully to those of other speakers	flexibly and effectively in an assured, personal, style.	I can present clear, detailed descriptions of complex subjects integrating sub-themes, developing particular points and rounding off with an appropriate conclusion	I can expri clear, well text, expro- of view at I can write exposition report, un I consider salient iss salient iss write diffe texts in a appropriat	ess myself in -structured essing points some length. e detailed is of complex i an essay or a derlining what to be the ness. I can renat kinds of style e to the mind.
B2	I can understand extended speech and loctures and follow even complex lines of argument provided the topic is reasonably familiar. I can understand most TV news and current affairs programmes. I can understand the majority of films in standard dialect.	I can read articles and reports concerned with contemporary problems in which the writers adopt particular stances or viewpoints. I can understand contemporary literary prose.	I can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible. I can take an active part in discussion in familiar contexts, accounting for and sustaining my views.	I can write letters highlighting the personal significance of events and experiences.	I can present clear, detailed descriptions on a wide range of subjects related to my field of interest. I can explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.	text on a v subjects m interests. I essay or m on inform reasons in	e clear, detailed vide range of elated to my lean write an eport, passing ation or giving support of or varticular point
B1	I can understand the main points of clear standard speech on familiar matterss regularly encountered in work, school, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear.	I can understand texts that consist mainly of high frequency everyday or job-related language. I can understand the description of events, feelings and wishes in personal letters	I can deal with most situations likely to arise whilst travelling in an area where the language is spoken. I can enter unprepared into conversation on topics that are familiar, of personal interest or pertinent to everyday life (e.g family, hobbics, work, travel and current events).	I can write personal letters describing experiences and impressions.	I can connect phrases in a simple way in order to describe experiences and events, my dreams, hopes & ambitions. I can briefly give reasons and explanations for opinions and plans. I can narrate a story or relate the plot of a book or film and describe my reactions.	I can writi straightfoi connected topics, wh familiar, o interest.	ward text on
A2	I can understand phrases and the highest frequency wocabulary related to areas of most immediate personal relevance (e.g. very basic personal and family information, shopping, local geography, employment). I can catch the main point in shoet, clear, simple messages and announcements	I can read very short, simple texts. I can find specific, predictable information in simple everyday material such as advertisements, prospectuses, menus and timetables and I can understand short simple personal letters	I can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. I can handle very short social exchanges, even though I can't usually understand enough to keep the conversation going myself.	I can write short, simple notes and messages relating to matters in areas of immediate need. I can write a very simple personal letter, for example thanking someone for something.	I can use a series of phrases and sentences to describe in simple terms my family and other people, living conditions, my educational backgroun and my present or most recent job	simple ph sentences simple co "and", "be "because"	linked with mectors like tt" and
AI	I can recognise familiar words and very basic phrases concerning myself, my family and immediate concrete surroundings when people speak slowly and clearly.	I can understand familiar names, words and very simple sentences, for example on notices and posters or in catalogues.	I can interact in a simple way provided the other person is prepared to repeat or rephrase things at a slower rate of speech and help me formulate what I'm trying to say. I can ask and answer simple questions in areas of immediate need or on very familiar topics.	I can write a short, simple postcard, for examples sending holiday greetings. I can fill in forms with personal details, for example entering my name, nationality and address on a hotel registration form.	I can use simple phrases and sentences to describe where I live and people I know.	I can writs isolated pl sentences.	mases and

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41/46

Qualitative aspects of spoken language use



	RANGE	ACCURACY	FLUENCY	INTERACTION	COHERENCE
C2	Shows great flexibility reformulating ideas in differing linguistic forms to convey finer shades of meaning precisely, to give emphasis, to differentiate and to eliminate ambiguity. Also has a good command of idiomatic expressions and colloquialisms.	Maintains consistent grammatical control of complex language, even while attention is otherwise engaged (e.g. in forward planning, in monitoring others' reactions).	Can express him/herself spontaneously at length with a natural colloquial flow, avoiding or backtracking around any difficulty so smoothly that the interlocutor is hardly aware of it.	Can interact with ease and skill, picking up and using non-verbal and intonational cues apparently effortlessly. Can interweave his/her contribution into the joint discourse with fully natural <u>turntaking</u> , referencing, allusion making etc.	Can create coherent and cohesive discourse making full and appropriate use of a variety of organisational patterns and a wide range of connectors and other cohesive devices.
CI	Has a good command of a broad range of language allowing him/her to select a formulation to express him/ herself clearly in an appropriate style on a wide range of general, academic, professional or leisure topics without having to restrict what he/she wants to say.	Consistently maintains a high degree of grammatical accuracy; errors are rare, difficult to spot and generally corrected when they do occur.	Can express him/herself fluently and spontaneously, almost effortlessly. Only a conceptually difficult subject can hinder a natural, smooth flow of language.	Can select a suitable phrase from a readily available range of discourse functions to preface his remarks in order to get or to keep the floor and to relate his/her own contributions skilfully to those of other speakers.	Can produce clear, smoothly flowing, well-structured speech, showing controlled use of organisational patterns, connectors and cohesive devices.
B2	Has a sufficient range of language to be able to give clear descriptions, express viewpoints on most general topics, without much conspicuous searching for words, using some complex sentence forms to do so.	Shows a relatively high degree of grammatical control. Does not make errors which cause misunderstanding, and can correct most of his/her mistakes.	Can produce stretches of language with a fairly even tempo; although he/she can be hesitant as he or she searches for patterns and expressions, there are few noticeably long pauses.	Can initiate discourse, take his/her turn when appropriate and end conversation when he / she needs to, though he /she may not always do this elegantly. Can help the discussion along on familiar ground confirming comprehension, inviting others in, etc.	Can use a limited number of cohesive devices to link his/her utterances into clear, coherent discourse, though there may be some "jumpiness" in a long contribution.
B1	Has enough language to get by, with sufficient vocabulary to express him/herself with some hesitation and <u>circume</u> locutions on topics such as family, hobbies and interests, work, travel, and current events.	Uses reasonably accurately a repertoire of frequently used "routines" and patterns associated with more predictable situations.	Can keep going comprehensibly, even though pausing for grammatical and lexical planning and repair is very evident, especially in longer stretches of free production.	Can initiate, maintain and close simple face-to-face conversition on topics that are familiar or of personal interest. Can repeat back part of what someone has said to confirm mutual understanding.	Can link a series of shorter, discrete simple elements into a connected, linear sequence of points.
A2	Uses basic sentence patterns with memorised phrases, groups of a few words and formulae in order to comminicate limited information in simple everyday situations.	Uses some simple structures correctly, but still systematically makes basic mistakes.	Can make him/herself understood in very short utterances, even though pauses, false starts and reformulation are very evident.	Can answer questions and respond to simple statements. Can indicate when he/she is following but is rarely able to understand enough to keep conversation going of his/her own accord.	Can link groups of words with simple connectors like "and, "but" and "because".
AI	Has a very basic repertoire of words and simple phrases related to personal details and particular concrete situations.	Shows only limited control of a few simple grammatical structures and sentence patterns in a memorised repertoire.	Can manage very short, isolated, mainly pre- packaged utterances, with much pausing to search for expressions, to articulate less familiar words, and to repair communication.	Can ask and answer questions about personal details. Can interact in a simple way but communication is totally dependent on repetition, rephrasing and repair.	Can link words or groups of words with very basic linear connectors like "and" or "then".

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42/46

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- Where I come from
- * Who I am
- ***** Evaluation

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- Translation/Post-edition Quality
- -Language Level
- *** Research Field**

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43/46

Research Field

* Task-based Evaluation

*** Competence-based Evaluation**

*** Tool features**

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Thanks for your attention...

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[3] Lucia Specia, N. C., and Dymetman, M. A dataset for assessing machine translation evaluation metrics. In proceedings of the 7th Conference on International Language Resources and Evaluation (LREC) (Valletta, Malta, May 2010).

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Obrigado !

Emmanuelle.Esperanca-Rodier@imag.fr



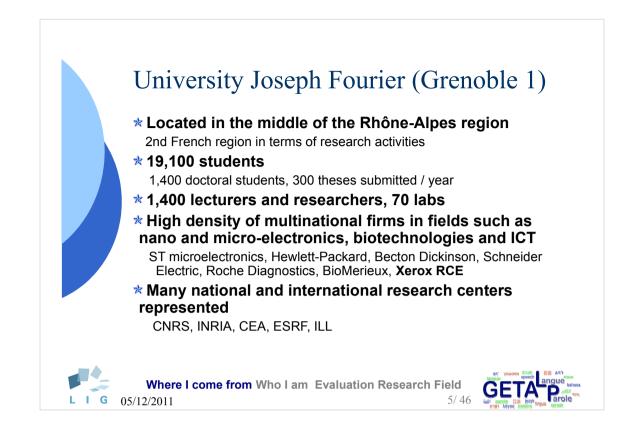




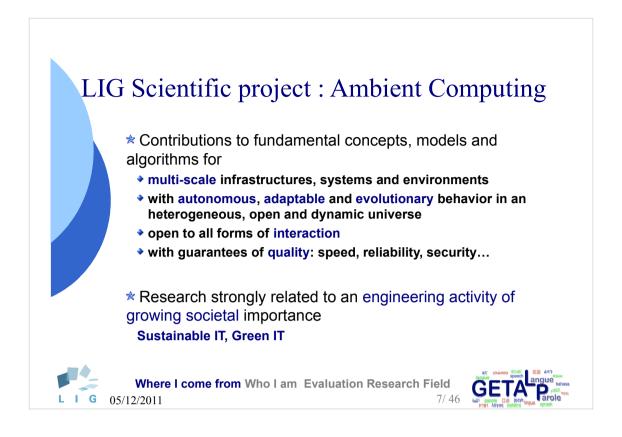


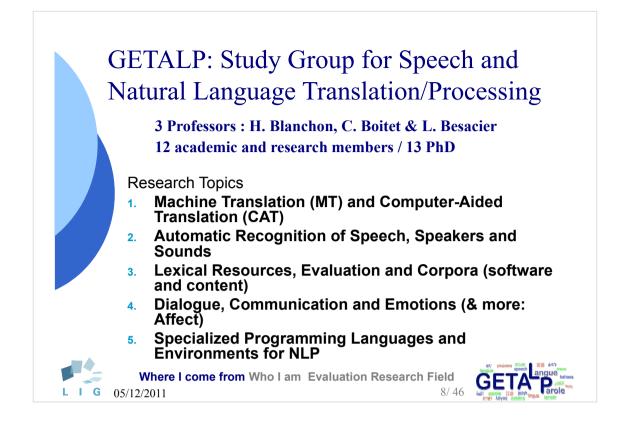


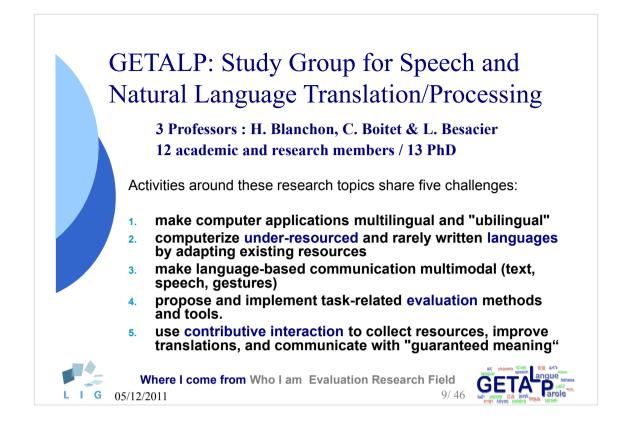


















Source: IWSLT07_TEST_463، أين الحمام Reference: IWSLT07_TEST_463:1/Where is the restroc	om ?	
Translation	Adequacy	Fluency
IWSLT07_TEST_463-spk24_3\Where is the lavatory ?	$\begin{array}{c} \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$	
IWSLT07_TEST_463\Where's the toilet?	$\begin{array}{c} \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$	
IWSLT07_AE_TEST_463\Where is the lavatory ?	$\begin{array}{c} \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$	$\begin{array}{c} \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \\ 1 \ 2 \ 3 \ 4 \ 5 \end{array}$
Annotator: cam Task: IWSLT07 Arabic English ASR NIST		Annotate
Instructions	5= All Meaning 4= Most Meaning 3= Much Meaning 2= Little Meaning 1= None	3= Non-native English



Where I come from Who I am Evaluation Research Field 20/46



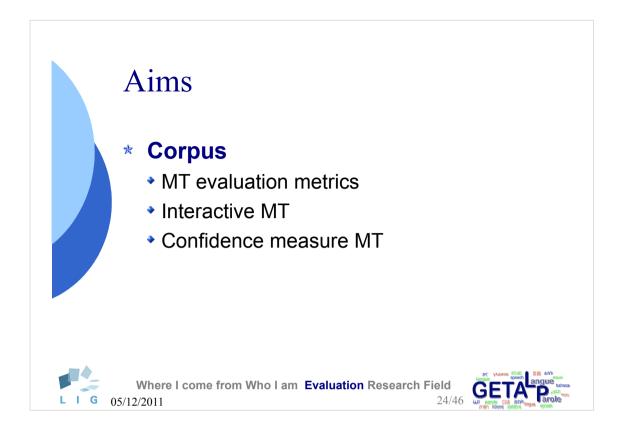
Reference: IWSLT07_TEST_159\1\C	an I receive email at t	this addre	ss ?			
Translation IWSLT07_CE_TEST_159\Can you m	ail this mail address ?		0 2	0 3	0 4	C 5
Will this e mail mail ?		Worst 0 1 Worst	0 2	0 3	0 4	Be 5 Be
IWSLT07_CE_TEST_159\Can you ac address ?	cept mail this mail	0 1 Worst	0 2	0 3	0 4	C 5 Be
IWSLT07_TEST_159\This address E ; mail.	nail, will you accept	0 1 Worst	0 2	0 3	0 4	C 5 Be
IWSLT07_CE_TEST_159\Can you m	ail this e-mail ?	0 1 Worst	$\stackrel{\bigcirc}{_2}$	0 3	0 4	O 5 Bes
Annotator: cam Task: IWSLT07 Ch Instructions: Rank each whole sentence translation relative to the other choices (ties are allo	from Best to Worst				A	Annotat

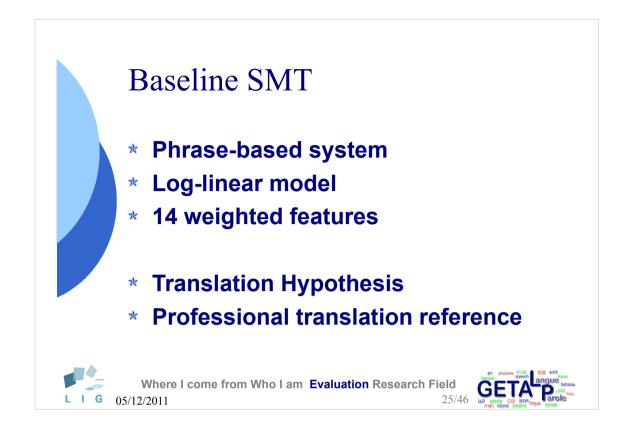
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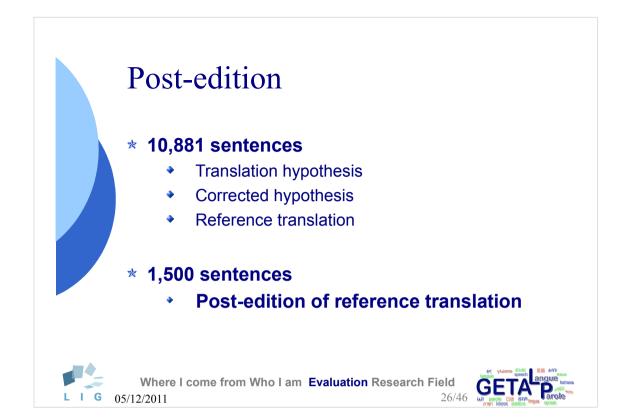






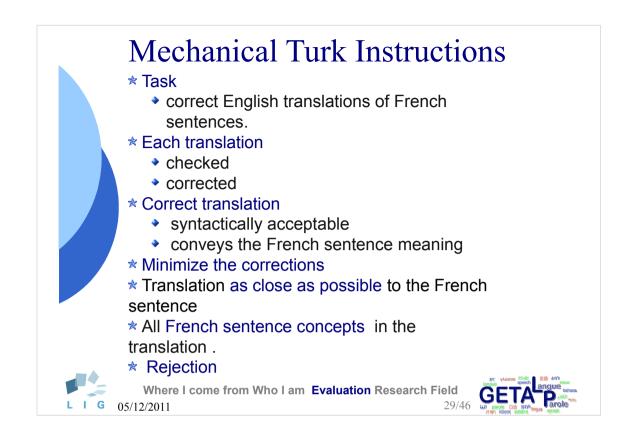


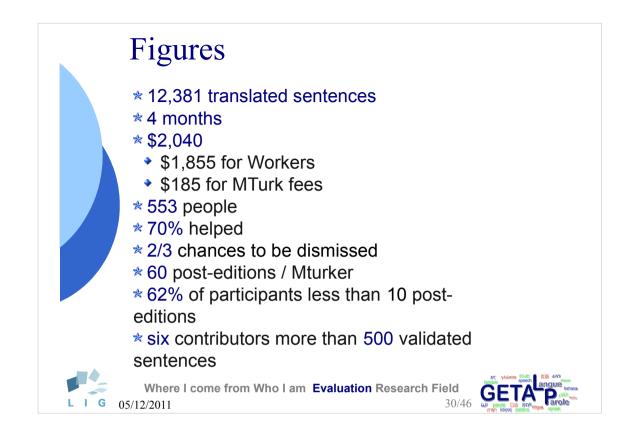






ar	Protected IETS This has you is fail this to southers. Make use that day validates in to IFT are use Concert Desta editors. US "You have used and used and used to US IST Research: The souther and the south of the Souther is to the South of the Souther is the	terme billion benefit in the second and the se	point agriculture of the second secon
	Phrase source: It baitt alors a fortune dans l'expansion immobilière. Traduction automatique: Then he built his fortune in the boom in property.	Traduction à corriger	
	Previous NT	Showing HET 3 of 4035 Need HET States a Data	elasta a
Where I co L I G 05/12/2011		valuation Development Peess Polanse valuation for ets officer	28/46 Water Clarge Carlos Control Cont











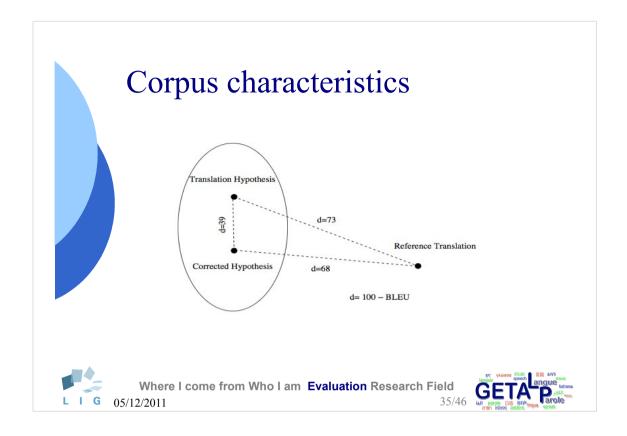
Subjective evaluation of postedition quality

	Post-edition	ok	Unsignificant	Minor	Significant	Serious	Total (%)
_	judgment		mistake	mistake	error	error	
-	Better	189	13	20	42	8	271 (87.1%)
	Equivalent	10	11	9	0	0	39(12.5%)
	Worse	0	1	0	0	0	1 (0.3%)
	Total	199	25	29	51	8	311
	%	64.0	8.0	9.3	16.4	2.6	



Where I come from Who I am Evaluation Research Field 05/12/2011 34/46





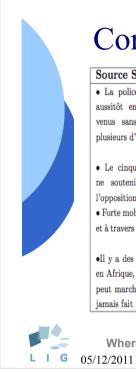
Corpus characteristics

Corpus	Type of compared translations	BLEU Score
corpus-10881	Hypothesis & Reference	27,03
	Hypothesis & Corrected Hypothesis	61,41
	Corrected Hypothesis & Reference	32,20
corpus-1500	Hypothesis & Reference	29,48
-	Hypothesis & Corrected Hypothesis	65,10
	Corrected Hypothesis & Reference	36,96
	Reference & Corrected Reference	71,90
	Corrected Hypothesis & Corrected Reference	43,40



Where I come from Who I am Evaluation Research Field 05/12/2011 36/46





Corpus examples

Source Sentence	Translation Hypothesis	Corrected Hypothesis
• La police anti-émeutes les ont	• The anti-riot police were immedi-	• The Anti-riot policemen were
aussitôt encerclés et sont inter-	ately surrounded and spoke blunty,	immediately surrounded them
venus sans ménagement, jetant	several of them on land.	and spoke blunty stepped in
plusieurs d'entre eux à terre.		ruthlessly, throwing several of
		them on land to the ground.
• Le cinquième candidat affirme	• The fifth candidate says it sup-	• The fifth candidate says it he
ne soutenir ni le pouvoir, ni	port nor the current leadership,	support nor neither the current
l'opposition.	nor the opposition.	leadership, nor the opposition.
• Forte mobilisation à Copenhague	• Strong involvement in Copenh-	• Strong involvement mobiliza-
et à travers le mode, pour le climat.	ague and in the world climate.	tion in Copenhague and in across
		the world for the climate.
•Il y a des rivières qui s'assèchent	• There are rivers are drying up in	• There are rivers are drying up
en Afrique, des cours d'eau où l'on	Africa, rivers where you can walk	in Africa, rivers watercourses
peut marcher comme on ne l'avait	as it had never done before.	where you one can walk as it had
jamais fait avant.		never done before.

Where I come from Who I am Evaluation Research Field 12/2011 37/46



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Corpus examples

Source Sentence	Reference Translation	Corrected Reference
• Mais une fiscalité insuffisante	• Too little taxation can do the	• But Too little an insufficient
peut également produire les mêmes	same.	taxation can also do have the
effets.		same effects.
• Le malaise français n'a cer-	• The French malaise has nothing	• The French malaise has
tainement pas été induit par ces	to do with any of them.	nothing to do with was certainly
réformes.		not induced by any of them
		these reforms.
• Mais quelle est la signification	• But what do solidarity and sub-	• But what do solidarity and
réelle de ces deux principes ?	sidiarity really mean?	subsidiarity really mean is the
		real meaning of these two
		principles ?
• Les traités européens expriment	• In the European Treaties, we find	• In The european treaties we
clairement cette subsidiarité verti-	a clear expression of vertical sub-	find a clear expression of clearly
cale.	sidiarity.	express this vertical subsidiarity.



Where I come from Who I am Evaluation Research Field 05/12/2011





ıt User	C2	Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
Proficient User	C1	Can understand a wide range of demanding, longer texts, and recognise implicit mean- ing. Can express him/herself fluently and spontaneously without much obvious search- ing for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
Independent User	B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
Indepen	B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics, which are familiar, or of personal interest. Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans.
Basic User	A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
Bas	A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

CEED		Recep		Interacti		Produ	
CEFR		Listening	Reading	Spoken Interaction	Written Interaction	Spoken Production	Written Production
CLIK	C2	I have no difficulty in understanding any kind of spoken language, whether live or broadcast, even when delivered at fast native speed, provided I have some time to get familiar with the accent.	I can read with ense virtually all forms of the written language, including abstract, structurally or linguistically complex texts such as manuals, specialised articles and literary works.	I can take part effortfessly in any conversion or discussion and have a good familiarity with idiomatic expressions and collequialisms. I can express insert filmoutly and concy- precisely. If I do have a precisely. If I do have a prediced, I can backtrack and restructure around the difficulty so smoothly that other people are handly aware of a.	I can express myself with clarity and precision, relating to the addressee	I can present a clear, smoothy-flowing description or argument in a style appropriate to the context and with an effective logical structure which helps the receiptent to notice and remember significant points.	I can write clear, amorthy Howing text in an appropriate style, can write complex betters, reports or case with an effective logical structure, which helps the recipient to notice and remember significant points. I can write summaries and reviews of peofessional or literary works.
	CI	I can understand extended speech even when it is not clearly structured and when relationships are only implied and not signalide explicitly. I can understand television programmes and films without too much effort.	I can understand long and complex floctual and literary texts, appreciating distinctions of style. I can understand specialised articles and longer technical instructions, even when they do not welate to my field.	I can express myself fluently and spontaneously without much obvious searching for expressions. I can use language floathy and professional purposes. I can formulate ideas and opinious with precision and rehate my contribution skilfully to those of other speakers	Rexibily and effectively in an assured, personal, style.	I can present clear, detailed descriptions of complex subjects integrating sub-thernes, developing particular points and reunding off with an appropriate conclusion	I can express myself in clean, well-structured text, expressing points of view at some length. I can write detailed expositions of complex subjects in an essary or a report, underlining what I consider to be the suilent isspes. I can write different kinds of texts in a style appropriate to the reader in pind.
	B2	I can understand extended speech and loctures and follow even complex lines of argument provided the topic is reasonably familiar. I can understand most TV news and current understand the majority of films in standard dialect.	I can read articles and reports concerned with contemporary problems in which the writers adopt particular stances or viewpoints. I can understand contemporary literary prose.	I can interact with a degree of fluency and spontaneity that makes regular interaction with native spoakers quite possible. I can take an active part in discussion in familiar cornexts, accounting for and sustaining my views.	I can write letters highlighting the personal significance of events and experiences.	descriptions on a wide range of subjects related to my field of interest. I can explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.	I can write clear, detaile text on a wide range of subjects related to my interests. I can write an essay or report, passing on information or giving reasons in support of or against a particular poin of view.
	B1	I can understand the main points of clear standard speech on familiar matters regularly encountered in work, achool, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear.	I can understand texts that consist mainly of high frequency everyday or job-related language. I can understand the description of events, feelings and wishes in personal letters	I can deal with most situations likely to arise whilst travelling i an area where the language is spoken. I can enter unprepared into conversation on topics that are familis, hobbies, work, travel and current events).	I can write personal letters describing experiences and impressions.	I can connect phrases in a simple way in order to describe experiences and events, my dreams, hopes & ambitions. I can briefly give reasons and explanations for opinions and plans. I can narrate a story or relate the plot of a book or film and describe my reactions.	I can write straightforward connected text on topics, which are familiar, or of personal interest.
	A2	I can understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance (e.g. very basic personal and family information, stopping), comployment). I can cotch the main point in shoet, clear, simple messages and unnouncements	I can read very shoet, simple texts. I can find specific, predictable information in simple everyday material such as adventisements, prespectases, menus and timetables and I can understand short simple personal letters	I can communicate in simple and resurine tasks requiring a simple and direct exchange of information on familiar topics and activities. I can hundle very short social exchanges, even though I can't usually understand enough to keep the conversation going inyself.	I can write short, simple notes and messages relating to- matters in areas of immediate need. I can write a very simple personal letter, for example thanking someone for something.	I can use a series of phrases and sentences to describe in simple terms my finely and other people, living conditions, my educational backgroun and my present or most recent job	I can write a series of simple phrases and sentencesilinked with simple connectors like "and", "but" and "because".
	AI	I can recognise flamiliar words and very basic phrases concerning myself, my family and immediate concrete surroundings when people speak slowly and clearly.	I can understand familiar names, words and very simple sentences, for example on notices and posters or in catalogues.	I can interact in a simple way provided the other presents is prepared to repeat or rephrase things at a slower rate of speech and help me formulate what I'm tying to say. I can ask and answer simple questions in areas of innmediate need or on very famillar topics.	I can write a short, simple postcard, for examples sending holiday greetings. I can fill in forms with personal details, for example entering my name, nationality and address on a hotel registration form.	I can use simple plarases and sentences to describe where I live and people I know.	I can write simple isolated phrases and sentences
Where I com	e fr	om Who I a	ım Evalu	ation Resear	ch Field		Angue baha
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		RANGE	ACCURACY	FLUENCY	INTERACTION	COHERENCE
CEFR	C2	Shows great flexibility reformulating ideas in differing linguistic forms to convey finer shades of meaning precisely, to give emphasis, to differentiate and to eliminate ambiguity. Also has a good command of idiomatic expressions and colloquialisms.	Maintains consistent grammatical control of complex language, even while attention is otherwise engaged (e.g. in forward planning, in monitoring others' reactions).	Can express him/herself spontaneously at length with a natural colloquial flow, avoiding or backtracking around any difficulty so smoothly that the interlocutor is hardly aware of it.	Can interact with ease and skill, picking up and using non-verbal and intonational cues apparently effortlessly. Can interweave his/her contribution into the joint discourse with fully natural <u>nurnlaking</u> , referencing, allusion making etc.	Can create coherent and cohesive discourse making full and appropriate use of a variety of organisational patterns and a wide range of connectors and other cohesive devices.
	CI	Has a good command of a broad range of language allowing him/her to select a formulation to express him/ herself clearly in an uppropriate style on a wide range of general, academic, professional or leisure topics without having to restrict what he/she wants to say.	Consistently maintains a high degree of grammatical accuracy; errors are rare, difficult to spot and generally corrected when they do occur.	Can express him/herself fluently and spontaneously, almost effortlessly. Only a conceptually difficult subject can hinder a natural, smooth flow of language.	Can select a suitable phrase from a readily available range of discourse functions to preface his remarks in order to get or to keep the floor and to relate his/her own contributions skilfully to those of other speakers.	Can produce clear, smoothly flowing, well-structured speech, showing controlled use of organisational patterns, connectors and cohesive devices.
	B2	Has a sufficient range of language to be able to give clear descriptions, express viewpoints on most general topics, without much conjecticuous searching for words, using some complex sentence forms to do so.	Shows a relatively high degree of grammatical control. Does not make errors which cause misunderstanding, and can correct most of his/her mistakes.	Can produce stretches of language with a fairly even tempo; although be/she can be hesitant as he or she searches for patterns and expressions, there are few noticeably long pauses.	Can initiate discourse, take his/her turn when appropriate and end conversation when he / she needs to, though he / she needs to, though he / she elegantly. Can help the discussion along on familiar ground confirming comprehension, inviting others in, etc.	Can use a limited number of cohesive devices to link his/her uttrances into clear, coherent discourse, though there may be some "jumpiness" in a long contribution.
	В1	Has enough language to get by, with sufficient vocabulary to express him/herself with some hesitation and <u>circume</u> <u>locutions</u> on topics such as family, hobbies and interests, work, travel, and current events.	Uses reasonably accurately a repertoire of frequently used "routines" and patterns associated with more predictable situations.	Can keep going comprehensibly, even though pausing for grammatical and lexical planning and repair is very evident, especially in longer stretches of free production.	Can initiate, maintain and close simple face-to-face conversigion on topics that are familiar or of personal interest. Can repeat back part of what someone has said to confirm mutual understanding.	Can link a series of shorter, discrete simple elements into a connected, linear sequence of points.
	A2	Uses basic sentence patterns with memorised phrases, groups of a few words and formulae in order to comminicate limited information in simple everyday situations.	Uses some simple structures correctly, but still systematically makes basic mistakes.	Can make him/herself understood in very short utterances, even though pauses, false starts and reformulation are very evident.	Can answer questions and respond to simple statements. Can indicate when he/she is following but is rarely able to understand enough to keep conversation going of his/her own accord.	Can link groups of words with simple connectors like "and, "but" and "because".
	AI	Has a very basic repertoire of words and simple phrases related to personal details and particular concrete situations.	Shows only limited control of a few simple grammatical structures and sentence patterns in a memorised repertoire.	Can manage very short, isolated, mainly pre- packaged utterances, with much pausing to search for expressions, to articulate less familiar words, and to repair communication.	Can ask and answer questions about personal details. Can interact in a simple way but communication is totally dependent on repetition, rephrasing and repair.	Can link words or groups of words with very basic linear connectors like "and" or "then".







