Colours, clothing and food in CorTrad:

why corpus-based translation studies are revealing

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- Short introduction to CorTrad
- Description of the current semantic information and its human revision
  - Size and distribution
  - Annotation rationale
- Some contrastive issues

Parallel corpora and translation

- ✓ Isabelle (1992), McEnery & Wilson (1993) and Somers (1993) – potential for **machine translation**
- ✓ Johansson & Hofland (1994), Santos (1995) and Tagnin (2004) – potential for **contrastive studies**
- ✓ Malmkjaer (1998), Frankenberg-Garcia (1999) and Peters *et al.* (2000) – potential for **translation teaching**

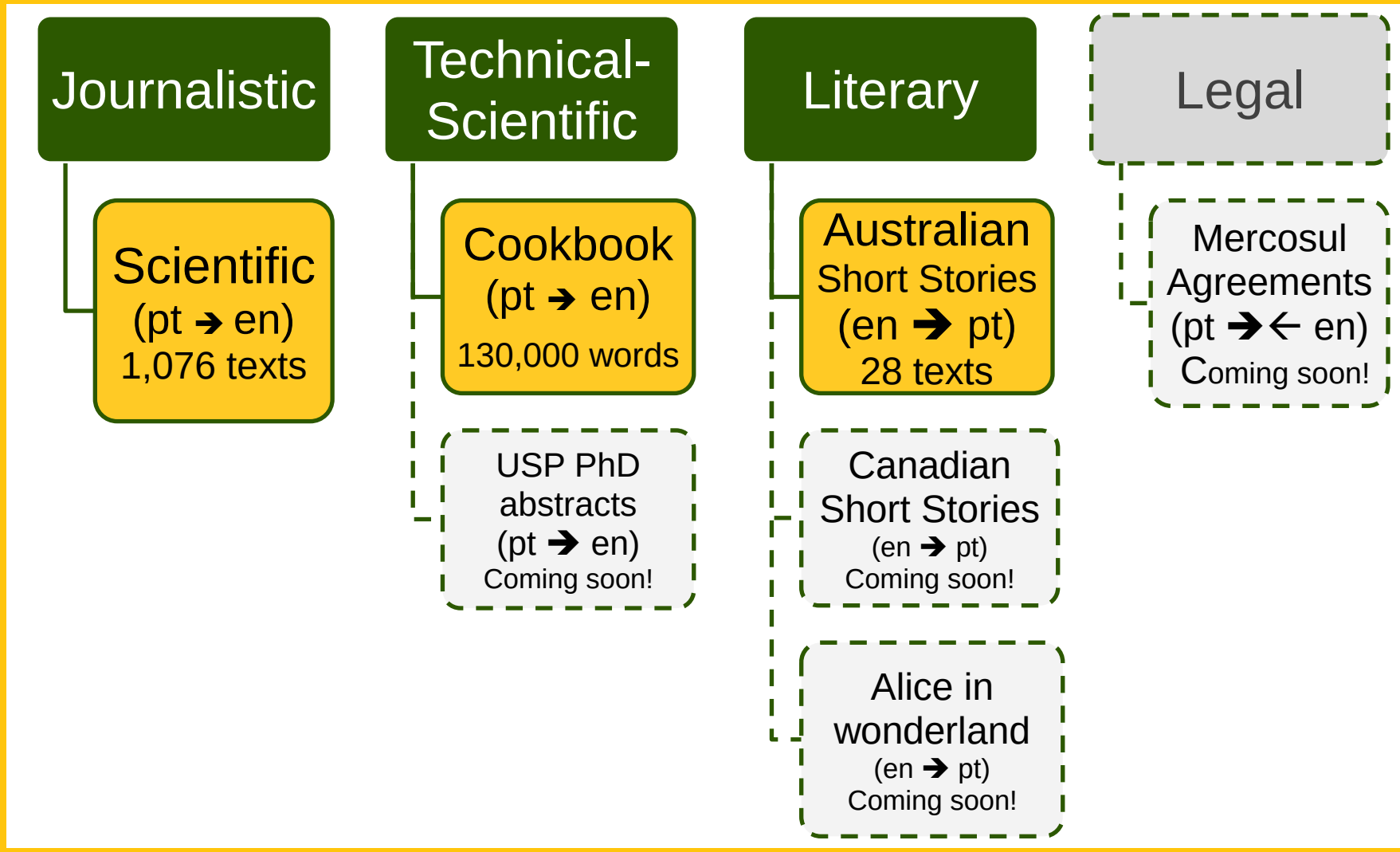
CorTrad in a nutshell

- ✓ Annotated, multiversion pt-en-pt parallel corpus
- ✓ Started in May 2008
- ✓ Partnership:
  - ✓ Linguateca (design, development & implementation of computational framework)
  - ✓ CoMET Project (design & text collection and edition)
  - ✓ NILC - Inter Institutional Center for Computational Linguistics (web hosting)

CorTrad in a nutshell

- ✓ **Innovations** compared to other parallel corpora:
  - ✓ **Multiversion** format allows
    - ✓ comparison of different translation stages
    - ✓ study of revision process
  - ✓ **Refined search system** – tailored especially for each genre and text type
  - ✓ **Semantic information** – added and human-revised

CorTrad Parallel Subcorpora



Journalistic (Science): Revista FAPESP

Original

(Brazilian Portuguese)

Published translation

(online publication)

Technical-Scientific: Cookbook

Original (Brazilian Portuguese)

Translators' first version (English)

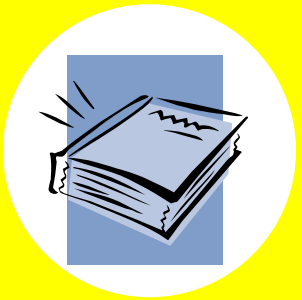
Revised text (by native speaker)

Published translation

(not yet avail. online)

Literary:
Australian short stories
(*learner corpus)

Original (Australian English)



Student's translation (Brazilian Portuguese)

Revised draft (after teacher's suggestions)

Published translation

Search and annotation system

DISPARA (Santos 2002) – system to make parallel corpora available on the Web

- ✓ **Corpus processing system**
  - → IMS-CWB (Christ *et al*. 1999), now **Open CWB** (Evert 2010)
- ✓ **Underlying parser and tagger**
  - → Portuguese: **PALAVRAS** (Bick, 2000) http://visl.hum.sdu.dk/visl/pt/
  - → English: **CLAWS** (Rayson & Garside 1998) http://www.comp.lancs.ac.uk/computing/research/ucrel/claws/
  - → Semantic annotation: **corte-e-costura** (Santos & Mota 2010)
- ✓ **Interface (**graphic design by Patricia Tagnin)

CorTrad’s Semantic annotation:

some findings on colour and clothing

Semantic information: colour

	Cooking	Scientific news	Short stories	Totals
Pure colour	574	372	344	**1290**
Conventional	310	153	2	**465**
Race	0	45	13	**58**
Human	0	7	39	**46**
Absence	7	21	22	**50**
Wine	87	1	6	**94**
Totals	**985**	**599**	**428**	
Word count	134,093	776,284	121,253	

Search expression: [sema="cor.*"] Result type: semantic field

10 most recurring colour terms

Scientific news (or)		Short stories (tr)		Cookbook (or)	
cor	86	branco	69	dourar	341
branco	57	azul	48	branco	144
vermelho	43	vermelho	37	vermelho	122
verde	42	cor	26	verde	113
negro	37	negro	25	preto	39
buraco negro	31	preto	22	cor	39
ultravioleta	28	verde	19	tinto	33
infravermelho	27	amarelo	18	dourado	27
azul	25	pálido	15	amarelo	16
amarelinho	22	cinza	13	roxo	14

Search expression: [sema="cor.*"] Result type: lemma distribution

“white” collocates in ≠ genres

Science news 45 (31)		Short stories 54 (27)		Cookbook 126 (24)	
glóbulo	4	mão	9	vinho	45
cabelo	4	homem	8	parte	14
cubo	3	pena	6	chocolate	12
mancha	3	cabelo	5	arroz	8
pelagem	2	látex	2	pele	8
luz	2	galão	2	fão de fôrma	7
população	2	blusa	2	milho	5
célula	2	…	1	pimenta-do-reino	3
…	1			fumaça	3
	1			carne	3
				peixe	3

Search expr.: [pos="N.*"] ([lema="branco"]|[grupo=“Branco”]) Lemma distrib.

Simple search: “dour.*” is not “golden.*”

PROJETO COMET
Corpus Multilíngue para Ensino e Tradução

USP

Confira as novas

- Principal
- O Projeto
- Equipe
- CorTec
- CoMAprend
- CorTrad
- Artigos, etc.
- Links
- Informativo
- Contato
- Site FFLCH
- Site USP

Início | Jornalístico | Literário | Técnico-científico

CorTrad técnico-científico culinária

O CorTrad é um corpus aberto, sujeito a alterações. Veja dados quantitativos para informações atualizadas sobre o conteúdo do corpus.

A **parte culinária do CorTrad** conta atualmente com o conteúdo integral de um livro de 350 páginas em quatro versões: o texto original, escrito em português brasileiro, a tradução para o inglês, feita por duas tradutoras brasileiras, a versão revisada dessa tradução, feita por uma falante nativa do inglês, e a versão final, publicada -- esta, ainda em preparação. Clique aqui para mais informações. A disponibilização do CorTrad na rede é um projeto conjunto entre o COMET, a Linguateca e o NILC, usando o sistema DISPARA.

Pesquisar no corpus

Original	principal	"dour.*"	ver
Primeira tradução	principal		ver
Tradução revisada	principal	!"gold.*"	ver

Ignorar maiúsculas/minúsculas

Pesquisar

Resultado

Concordância	Distribuição das formas
Distribuição dos lemas	Distribuição da categoria gramatical (PoS)
Distribuição do tempo verbal e/ou do caso pronominal	Distribuição de pessoa e/ou número
Distribuição do gênero morfológico	Distribuição da função sintática
Distribuição por parte de obra	Distribuição por tipo de texto
Distribuição por receita	Distribuição por campo semântico

Options

Result: “dour.*” ≠ “*golden.**”

PROJETO COMET
Corpus Multilíngue para Ensino e Tradução

USP

igos Conheç

Enquanto isso, **doure** ligeiramente os pinoli numa frigideira grande e seca e reserve.	Meanwhile, lightly toast pine nuts in a dry large frying pan and set aside.	Meanwhile, lightly toast pine nuts in a large dry frying pan and set aside.
Leve ao forno por uns 25 minutos para aquecer e **dourar** (se quiser, monte na véspera e guarde na geladeira sem assar).	Bake for about 25 minutes to heat thoroughly and brown the top (if you want, you can assemble lasagna a day ahead and refrigerate, unbaked).	Bake for about 25 minutes to heat thoroughly and brown the top (if you want, you can assemble lasagna a day ahead and refrigerate, unbaked).
Regue com um fio de azeite e asse por uns 15 minutos, até que a massa esteja bem **dourada** e crescida nas bordas.	Drizzle with olive oil and bake for about 15 minutes, until dough is dark brown and risen on the edges.	Drizzle with olive oil and bake for about 15 minutes, until dough is dark brown and risen on the edges.
Aqueça um fio de azeite numa panela grande que possa ir ao forno, junte metade da carne e mantenha o fogo forte para **dourar** e não juntar água.	Heat a drizzle of olive oil in a large ovenproof casserole dish, add half the meat and sear, over a high heat to prevent juices from escaping, until cubes are browned.	Heat a drizzle of olive oil in a large pot that can go into the oven, add half the meat and sear, over high heat to prevent juices from escaping, until cubes are browned.
Transfira os pedaços **dourados** para um prato, aqueça mais um pouco de azeite, doure a carne restante e passe também para o prato.	Transfer browned chunks to a plate, heat another drizzle of olive oil, sear remaining meat and transfer to the same plate.	Transfer browned chunks to a plate, heat another drizzle of olive oil, sear remaining meat and transfer to the same plate.
Transfira os pedaços dourados para um prato, aqueça mais um pouco de azeite, **doure** a carne restante e passe também para o prato.	Transfer browned chunks to a plate, heat another drizzle of olive oil, sear remaining meat and transfer to the same plate.	Transfer browned chunks to a plate, heat another drizzle of olive oil, sear remaining meat and transfer to the same plate.
Aqueça mais um fio de azeite, junte o bacon e, quando começar a **dourar**, acrescente a cebola, a cenoura, o salsão e 1 pitada de sal.	Heat a little more olive oil, add bacon and, when it begins to brown, stir in diced onion, carrot, celery, and a pinch of salt.	Heat a little more olive oil, add bacon and, when it begins to brown, stir in diced onion, carrot, celery, and a pinch of salt.
Pincele o rolo com a gema e asse por uns 25 minutos, até começar a **dourar**.	Brush roll with egg yolk and bake for 25 minutes or so, until it begins to brown.	Brush cylinder with egg yolk and bake for 25 minutes or so, until it begins to brown.
Espalhe as fatias sobre a assadeira e volte ao forno por mais 20 minutos, virando na metade do tempo para **dourar** por igual.	Spread slices out on baking sheet and return to oven for another 20 minutes, turning once halfway through, so they brown evenly.	in) thick slices. Spread slices out on baking sheet and return to oven for another 20 minutes, turning once halfway through, so they brown evenly.
Para começar, como o clima é de muita descontração, vêm uns camarões de médios para grandes, passados no gergelim, **dourados** no forno e servidos com palitinhos com um molhinho agridoce de abacaxi.	To start with, as the atmosphere exudes relaxation, there are the medium to large-sized shrimps, coated with sesame seeds, browned in the oven, and served with the aid of toothpicks for dipping in a sweet-n-sour pineapple sauce.	To start with, as the atmosphere exudes relaxation, there are the medium- to large-sized shrimps, coated with sesame seeds, browned in the oven, and served with the aid of toothpicks for dipping in a sweet-n-sour pineapple sauce.
Leve o salmão ao forno por uns 15 minutos, apenas o suficiente para terminar de **dourar** por fora e deixar o filé macio e rosado no centro.	Transfer salmon to preheated oven and bake for 15 minutes or so, just enough to crisp the outer crust and to tenderize the opaque pink flesh in the center.	Transfer salmon to preheated oven and bake for 15 minutes or so, just enough to crisp the outer crust and to tenderize the opaque pink flesh in the center.
A segunda leva folhas verdes, manga e tirinhas **douradas** e picantes de peito de frango.	The second takes green salad leaves, mango and browned and spicy strips of chicken breasts.	The second takes salad greens, mango and browned and spicy strips of chicken breasts.
Em seguida, aqueça um fio de óleo numa frigideira grande e	Then, discard chicken marinade, heat a drizzle of oil in a	Then, discard chicken marinade, heat a drizzle of oil in a large

Figurative expr. and terminology

- just declared itself **out to the blue**
- It was to be **black tie**.
- She never refused to go to Melbourne, but it was her hoodoo city, **a black jinx**.
- The dog knew they were coming, and barked **blue murder**.
- would quarrel with her till **the white hours**
- knowing about **brown rice**
- **blackfellow**
- **thin white sliced bread**
- **red wine**
- **red cabbage**

- surgira de repente, **do nada**
- O traje é **a rigor**.
- Nunca se negava a ir a Melbourne, mas era uma cidade de azar, **mau agouro.**
- O cachorro sabia que eles estavam vindo e latiu **desesperadamente**.
- de discutir com ela até **o amanhecer**
- Eu entendia sobre **arroz integral**
- **arborígene**
- **pão de forma**
- **vinho tinto**
- **repolho roxo**

Deemed unnecessary … or different associations

- She rushed to the back of the house and hauled the drowsy **black** pup out of the kennel.
- She began to prowl between the desks, waving the **white** letter like a flag.
- When the torrent of **white** water subsided
- The **brown** smell of his cigar
- **white** and blue enamel bowls
- She had the **tinted** view of the Irish
- **golden** summer

- Ela correu para os fundos da casa e puxou o sonolento filhote para fora da casinha.
- Então começou a rondar as carteiras, balançando a carta como se fosse uma bandeira.
- Quando a corrente de águas espumantes cessou,
- O aroma característico do charuto
- tigelas azuis esmaltadas
- Ela tinha a visão **cor-de-rosa** dos irlandeses

Concluding remarks on colour

- Totally different translation patterns for
  - Figurative language (most cases do not preserve colour)
  - Skin/race/culture colour (more differentiation in English)
  - Real colour
- Scientific news: a lot of (unexpected) colour in scientific terminology: disease names, stars, etc.
- Short stories: high correlation of clothing and colour

10 most recurring clothing words

Scientific News (or)		Short Stories (tr)		Cookbook (or)	
Total oc.	**58 (20)**	**Total oc.**	**380 (72)**	**Total oc.**	**21 (12)**
roupa	17	roupa	37	roupa	7
sapato	9	chapéu	30	avental	2
luva	5	vestir	27	vestir	2
calçado	4	sapato	26	chapéu	2
camiseta	4	vestido	24	...	1
vestir	2	usar	22		
bota	2	camisa	13		
anel	2	meia	10		
vestido	2	calça	10		
…	1	capa	10		

Search expression: [sema="roupa.*"] Result type: lemma distribution

Semantic information: clothing

	Cooking	Scientific news	Short stories	Totals
Pure clothing	21	50	378	**449**
Figurative	0	6	2	**8**
Totals	**21**	**56**	**380**	
Word count	134,093	776,284	121,253	

Search expression: [sema="roupa.*"] Result type: semantic field

Figurative expressions and non-clothing-referring clothes

- The arrangement **suited** Henry extremely well.
- He says the government will set an example in `**belt-tightening**´.
- desafio de **se pôr nos sapatos** de um arqueólogo
- do tamanho de uma caixa de **sapatos**,
- pense na **roupa**

- O esquema **caiu como uma luva** para Henry.
- Ele diz que o governo estabelecerá um exemplo de `**apertar os cintos**´.
- task of **wearing the hat** of an archeologist
- the size of a **shoebox**
- think of what you will wear

Concluding remarks on clothing

- Also different translation patterns for
  - Figurative language
  - The issue of *wear* vs. *vestir/calçar* and *usar*
- Scientific news: expressions related to clothing but no clothes (Shoebox, washing machine)
- Short stories: how culture dependent are some descriptions, and what was the stance taken by the translators?

Corpus-based TS are revealing because

- you discover what were the challenges for the translator
- you discover vagueness in both languages
- you find problems you had never thought about before
- you find creative solutions

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