

- 1. Background: the evolution of "quantitative" usage-based anglicism research
- 2. Overcoming the Bottleneck: presenting DAD
- 3. Negating the Wasteland: DAD's theoretical possibilities



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1. Background: the evolution of "quantitative" usage-based anglicism research

Krauss (1958) The increasing use of English words in German. The German Quarterly 31, 4, 272-286

Carstensen (1965) Englische Einflüsse auf die deutsche Sprache nach 1945. Heidelberg: Carl Winter

Yang (1990) Anglizismen im Deutschen. Tübingen: Max Niemeyer Verlag

Fink (1997) Von Kuh-Look bis Fit for Fun. Frankfurt am Main: Peter Lang

Onysko (2008) Anglicisms in German. Berlin/New York: Walter de Gruyter



- Data: newspaper corpora, leading to listings of anglicisms
- Main research lines: → anecdotal enumeration of anglicisms, complemented with corpus examples
 - → structuralist (quantified) account of spread & adaptation
- Side comments: → lexical variation (why the anglicism?)
 - → what about longer stretches of English
 - → what determines the life-span of anglicims?



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Krauss (1958)

"In the entertainment world - movies, music, radio, television - we find a large number. This is especially noticeable in film reviews. **We note such loans as** Show-Business, Come-back, Double, Musical, and Make-up in addition to familiar words like Star, Film, and En-gagement" (p.274)

Fink (1997)

- "- Allround Fitness Center
- Alpin-Freak: 'Die Jet-Hose von Colmar ... begeistert jeden Alpin-Freak.'
- Anti-Müffel-Shirt: 'Das Anti-Müffel-Shirt. Wenn das Deo allein zuwenig ist.'
- Are you ready to touch the world of Sport Freaks?
- **Babyface-Typ**: 'Durstige Babyface-Typen sollten stets ihren Ausweis mitnehmen: denn Alkohol gibt es erst ab 21 Jahren'. " (p.66/67)



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Carstensen (1965)

"Der Plural geht in den meisten Fällen auf –s aus: Count-downs, Callgirls, Eggheads etc. Entlehnungen auf –er schliessen sich an die zahlreichen dt. Wörter auf –er an (wie z.B. Mieter, Meister), die nur im Dativ Plural ein n, sonst keine Pluralendung haben" (p.67)

Yang (1990)

| Jahrgang | 1950 | 1960 | 1970 | 1980 |
|-------------|------|------|------|------|
| Substantive | 574 | 1023 | 3241 | 4443 |
| Verben | 50 | 45 | 168 | 199 |
| Adjektive | 9 | 43 | 134 | 119 |
| Adverbien | 0 | 3 | 14 | 5 |

Onysko (2008)

| anglicism | determinant | determinatum | sum (types) |
|-----------|-------------|--------------|-------------|
| Film | 297 | 162 | 459 |
| Computer | 367 | 58 | 425 |
| Internet | 354 | 3 | 357 |
| Test | 136 | 152 | 288 |
| Manager | 16 | 261 | 277 |



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Why do the side comments creep up so often, but aren't they ever dealt with?

- 1. quantitative accounts do not exploit the possibilities of statistical technique
- 2. data collections are too small to answer questions that rely heavily on high token frequencies / high TTR's



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Compare:

| distribution over POS: manager vs. cool | synonym distribution: 160 <i>managers</i> vs. 50 <i>bedrijfsleiders</i> | |
|---|--|--|
| gender assignment: manager vs. coolness | analysis of use of fixed expressions: as good as it gets in context | |
| type-oriented | token-oriented / TTR | |



Why do the side comments creep up so often, but aren't they ever dealt with?

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- 1. quantitative accounts do not exploit the possibilities of statistical technique
- 2. data collections are too small to answer questions that rely heavily on high token frequencies / high TTR's. WHY?
 - → Methodological bottleneck in extraction methods



Methodological bottleneck: manual extraction of anglicisms

| | Material | Extraction | Ang.Types | Ang.Tokens | Analyses |
|------------|-----------------|------------|-----------|------------|-------------|
| Krauss | "since 1956" | manual | ? | ? | qualitative |
| Carstensen | "1961-1964" | manual | ? | 2 per page | qualitative |
| Yang | 24 issues | manual | 3646 | 10 070 | descriptive |
| Fink | 10 issues | manual | ? | ? | descriptive |
| Onysko | 5 million words | man/TTR | 16 663 | 57 591 | descriptive |



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|------------|------------------|-------------|-----------|------------|-------------|
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| Carstensen | + | maximal c | ontrol | per page | qualitative |
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| | | | | | |



occasional attempts to automation

Pfitsner & Romsdorfer (2003), Farrugia (2005)

→ unevaluated, or evaluated on small sets

Alex (2005, 2008)

- → valuable
- → basic heuristic fully automatic (dictionary look-ups + web-based module)
- → full-fledged automation has led to:
 - exclusion of established anglicisms (computer, film, manager, job, ...)
 - neglect of precise and complete MWU-identification
 - remaining noise



+ maximally exhaustive- minimal control

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Due to minimal control



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Lack of exhaustivity

- neglect of precise and complete MWU-identification
- remaining noise



Summary

Existing anglicism research

- focus on structuralist aspects like the adaptation of anglicisms.
- socio-pragmatic issues are noticed, but neglected
- caused by data-sparseness
- the methodological bottleneck in extraction methods has to be overcome

Existing attempts to automation

- very few & preliminary attempts
- Alex (2005, 2008), but focus on possibilities of language processing, not on workable end-result
- neglect of established loans, noise and MWU's
- how to tailor to the needs of socio-pragmatic analyses?

Maximum control (attained)

Minimum exhaustivity

Maximum exhaustivity (aspired)

Minimum control



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maximally exhaustive maximal control





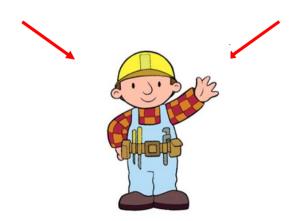
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Database of Anglicisms in Dutch

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| DAD | 1 billion words | semi-aut | > 100 000 | > 50 million | inferential |



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DAD: the Database of Anglicisms in Dutch

Material: Parsed Newspapers Corpora

TwNC: Netherlandic Dutch from 1999 to 2002
 LeNC: Belgian Dutch from 1999 to 2005

Goal:

tokenbased database of all English found in the corpus, accounting for:

- Dutch vs. English articles (language guesser)
- single tokens vs. MWU's and quotes (computer vs. venture capital)
- common vs. proper (as good as it gets vs. As Good As It Gets)

Method

automated where possible (Python) → exhaustivity complemented with manual coding → control



Method: overview

Type-Based

Extraction methods

Token-Based

- Getting out English articles
- Common or Proper?
- Identifying English MWU's

No one's perfect: what DAD can't do



Extraction Methods

Goal: a first rough list of all English in the corpora (*computer, whose, venture, capital, you, ...*)

Method:

- Type-based
- *Automated*: list-matching → exhaustivity
- *Manual*: filtering noise → control



Frequencylists for the corpora

- TwNC (POS)
- LeNC (no POS)

| bodembedekking |
|----------------|
| burka |
| Bush |
| |
| citroen |
| cd |
| |
| word |
| you |
| Youri |

Indexlist for English WordNet

- + Quirk (1985)
- + RE's for conjugated forms

| ankle |
|--------------|
| |
| burka |
| bush |
| |
| cd |
| |
| undergarment |
| word |
| you |

- capitalisation is disregarded
- only full matches are allowed

| bodembedekking |
|----------------|
| burka |
| Bush |
| |
| citroen |
| cd |
| |
| word |
| you |
| Youri |



Result:

> 55 000 types

→ what is going wrong?

> 400 million tokens

| bodembedekking |
|----------------|
| burka |
| Bush |
| |
| citroen |
| cd |
| |
| word |
| you |
| Youri |

| ankle |
|--------------|
| |
| burka |
| bush |
| |
| cd |
| |
| undergarment |
| word |
| you |

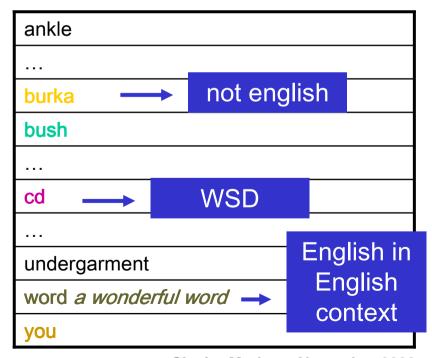
Result:

> 55 000 types

→ what is going wrong?

> 400 million tokens

| bodembedekking |
|--|
| burka |
| Bush |
| |
| citroen |
| cd |
| |
| word ik word gezien - 2 million tokens |
| you |
| Youri |



Manually: Filtering out Noise

Task: Classifying the 55 000 types in five groups:

- Definitely English (computer, acceptance, abundancy)
- Definitely not English (burka, auberge, aubergine, avantgarde)
- Unclear cases (*cd*, *sport*, *bandage*)
- English in an English Context (word, die, alarm, bombardment)
- Proper nouns (*Clinton, MacBeth*)

Sources:

- Van Dale Groot Woordenboek van de Nederlandse Taal
- Collin's Cobuild
- Oxford English Dictionary
- Wikipedia



| | Types | Tokens |
|-------------------------------|--------|-------------|
| Definitely English | 30 000 | 10 million |
| Definitely not English | 15 000 | 300 million |
| Unclear cases | 4000 | 6 million |
| English in an English context | 5500 | 122 million |
| Proper nouns | 1500 | 4 million |

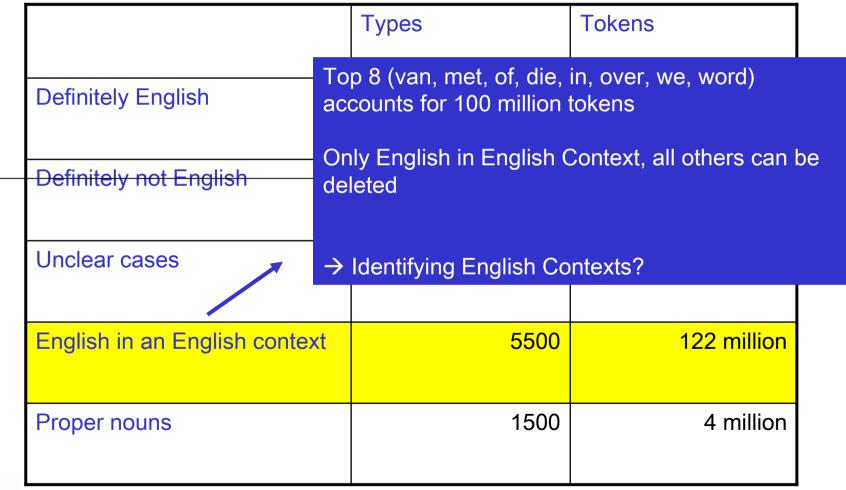


| | Types | Tokens |
|-------------------------------|-----------------|-------------|
| Definitely English | e.g. all number | 10 million |
| Definitely not English | 15 000 | 300 million |
| Unclear cases | 4000 | 6 million |
| English in an English context | 5500 | 122 million |
| Proper nouns | 1500 | 4 million |



| | Types | Tokens | |
|-------------------------------|---|--------|-------------|
| Definitely English | 30 000 | | 10 million |
| Definitely not English | For now, these will re unclear (see remar | | 300 million |
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| English in an English context | 5500 | | 122 million |
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Method: overview

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Extraction methods

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No one's perfect: what DAD can't do





From Types to Tokens

Type-Based List (after deleting "definitely not English") alphabetical

Token-Based List

"chronological", giving each token that occurs in the type-based list a special code

e.g. Op zijn computer zocht Clinton informatie over venture capital. Zijn computer werkte niet mee en hij zuchtte: "what a wonderful world".



From Types to Tokens

<sentence 00-01>

Op zijn computer zocht Clinton informatie rond venture capital.

<sentence 01-02>

Zijn computer werkte niet mee en hij zuchtte: "what a wonderful world".

| computer | <fn.s00-01.w02-03></fn.s00-01.w02-03> |
|-----------|---------------------------------------|
| Clinton | <fn.s00-01.w04-05></fn.s00-01.w04-05> |
| venture | <fn.s00-01.w07-08></fn.s00-01.w07-08> |
| capital | <fn.s00-01.w08-09></fn.s00-01.w08-09> |
| computer | <fn.s01-02.w01-02></fn.s01-02.w01-02> |
| what | <fn.s01-02.w08-09></fn.s01-02.w08-09> |
| а | <fn.s01-02.w09-10></fn.s01-02.w09-10> |
| wonderful | <fn.s01-02.w10-11></fn.s01-02.w10-11> |
| world | <fn.s01-02.w11-12></fn.s01-02.w11-12> |



- 1. Getting out English articles
- 2. Common or Proper?
- 3. Identifying English MWU's



- 1. Getting out English articles
 - language guesser
 - indicating for each element whether it is part of an English article

- 2. Common or Proper?
- 3. Identifying English MWU's



- 1. Getting out English articles
- Common or Proper?
 Based on capitalization and position within the sentence, taking punctuation into account

3. Identifying English MWU's



- 1. Getting out English articles
- 2. Common or Proper?
- 3. Identifying English MWU's

string identification

- Alpino Parser (automated)
- tokenbased list (semi-automated)

→ exhaustivity

string-coding:

- language choice (semi-automated)
- type of proper name (manual)

→ control



String Identification

Alpino

- → Using the parser's MWU-tagger
- → Checking for every token in the tokenbased list if it is part of an MWU
- → If so, conflate all lines belonging to the MWU

| computer | <fn.s00-01.w02-03></fn.s00-01.w02-03> |
|-----------|---------------------------------------|
| Clinton | <fn.s00-01.w04-05></fn.s00-01.w04-05> |
| venture | <fn.s00-01.w07-08></fn.s00-01.w07-08> |
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| what | <fn.s01-02.w08-09></fn.s01-02.w08-09> |
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| | computer | <fn.s00-01.w02-03></fn.s00-01.w02-03> |
|---|-----------------|---------------------------------------|
| | Clinton | <fn.s00-01.w04-05></fn.s00-01.w04-05> |
| • | venture capital | <fn.s00-01.w07-09></fn.s00-01.w07-09> |
| | computer | <fn.s01-02.w01-02></fn.s01-02.w01-02> |
| | what | <fn.s01-02.w08-09></fn.s01-02.w08-09> |
| | а | <fn.s01-02.w09-10></fn.s01-02.w09-10> |
| | wonderful | <fn.s01-02.w10-11></fn.s01-02.w10-11> |
| | world | <fn.s01-02.w11-12></fn.s01-02.w11-12> |
| | | |



String Identification

Complementation: the tokenbased list

- → Using the unique codes in the list
- → Looking for successions of elements
- → Allowing for interruptions by punctuation
- → Manual check-up (but learning process)

| computer | <fn.s00-01.w02-03></fn.s00-01.w02-03> |
|-----------------|---------------------------------------|
| Clinton | <fn.s00-01.w04-05></fn.s00-01.w04-05> |
| venture capital | <fn.s00-01.w07-09></fn.s00-01.w07-09> |
| computer | <fn.s01-02.w01-02></fn.s01-02.w01-02> |
| what | <fn.s01-02.w08-09></fn.s01-02.w08-09> |
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| wonderful | <fn.s01-02.w10-11></fn.s01-02.w10-11> |
| world | <fn.s01-02.w11-12></fn.s01-02.w11-12> |



String-Coding

MWU Language-Coding

- English / hybrid / not English
- based on language codes of the elements
- automatic where possible, manual where needed (learning process)

Proper-Coding (manual for freq >= 5)

- title/product
- event/organisation
- person
- location
- disease/nature

| computer | <fn.s00-01.w02-03></fn.s00-01.w02-03> |
|------------------------|---------------------------------------|
| Clinton | <fn.s00-01.w04-05></fn.s00-01.w04-05> |
| venture capital | <fn.s00-01.w07-09></fn.s00-01.w07-09> |
| computer | <fn.s01-02.w01-02></fn.s01-02.w01-02> |
| what a wonderful world | <fn.s01-02.w08-12></fn.s01-02.w08-12> |



DAD

| Token | Position | English art | language | type | PROP | PROP-type |
|---------------------------|---------------------------------------|-------------|----------|------|------|-----------|
| computer | <fn.s00-01.w02-03></fn.s00-01.w02-03> | NO | English | ST | СОМ | 1 |
| Clinton | <fn.s00-01.w04-05></fn.s00-01.w04-05> | NO | English | ST | PROP | person |
| venture capital | <fn.s00-01.w07-09></fn.s00-01.w07-09> | NO | English | MWU | СОМ | 1 |
| computer | <fn.s01-02.w01-02></fn.s01-02.w01-02> | NO | English | ST | СОМ | 1 |
| what a wonderful world | <fn.s01-02.w08-12></fn.s01-02.w08-12> | NO | English | MWU | СОМ | 1 |



Method: overview

Type-Based

Extraction methods

Token-Based

- Getting out English articles
- Common or Proper?
- Identifying English MWU's

No one's perfect: what DAD can't do



What DAD can't do

- No hybrids due to the list-matching technique (only full matches)
 - → some are found in the MWU-identification process
 - → others can be traced easily (e.g. all compounds with *manager*)
- 6 million unclear cases
 - a priori: exotisms, eponyms, neo-classical forms, ...
 - WSD: context per token?
 - > patch-work: using weighting techniques (e.g. *0.5)
 - > sampling: disambiguate manually for subsets
 - long-term solution: automatic WSD



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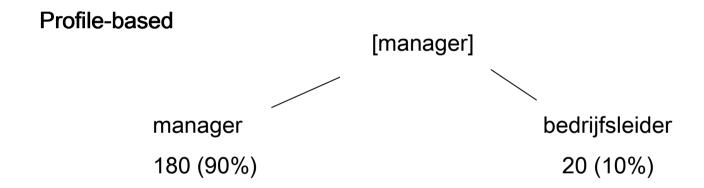


Main Questions

- lexical variation (why the anglicism?)
- what about longer stretches of English?
- what determines the life-span of anglicims?



Why use the anglicism?



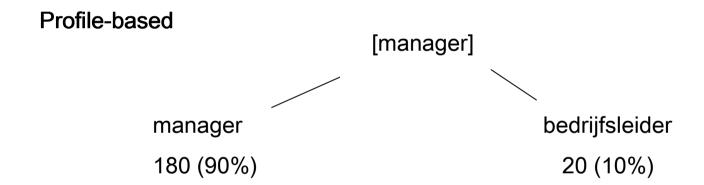
Variation in the succes of the anglicism?



| Manager | 86780 | Bedrijfsleider | 8632 |
|--------------|-------|----------------|-------|
| Babysit(ter) | 2673 | Oppas | 7395 |
| Expat | 619 | Emigrant | 2487 |
| Diehard | 417 | Volhouder | 484 |
| Loser | 2678 | Verliezer | 19539 |



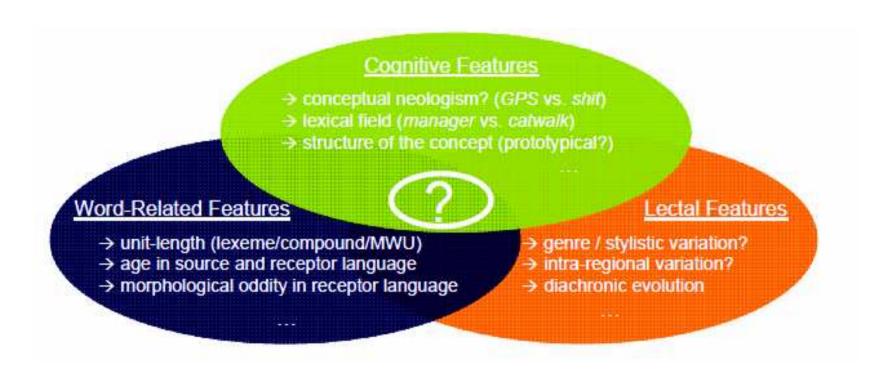
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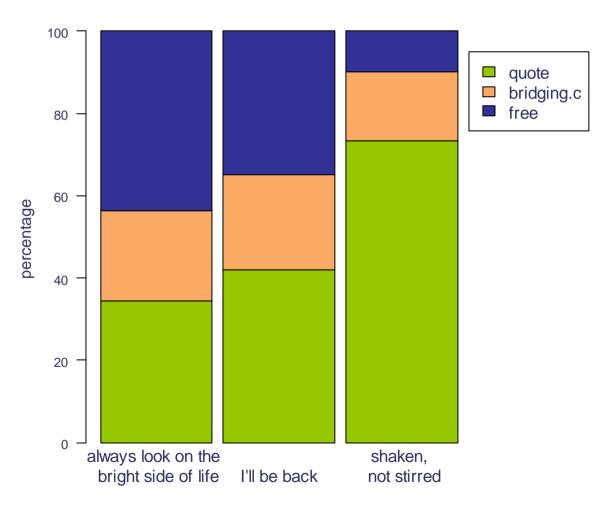


Why use the anglicism?





Phraseology: catchphrases





Survival Analysis

