

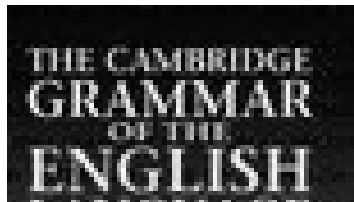
What is *that*?

On the syntactic status of *that*
in English relative clause constructions?

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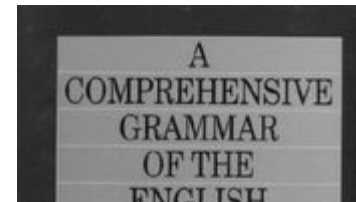
Issue

- The syntactic category status of relative *that* is controversial
- This controversial status is reflected in the treatment of “relative *that*” in reference grammars



BNC tagging treats *that* as
CJT (subordinating conjunction)
CJT-DT0 (in subject relatives)

Huddleston and Pullum 2002
(*that* -> **relative particle** or
complementizer)



ICE tagging treats *that* as
PRON(rel) (relative pronoun)

Quirk et al. 1985
relative pronoun

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What are we talking about?

- i. The dentist_i (who_i/ that / \emptyset) I saw _i last week is a moron. (object relative clause)

- ii. The dentist_i (who_i/ that / * \emptyset) saw my granny last week ... (subject relative)

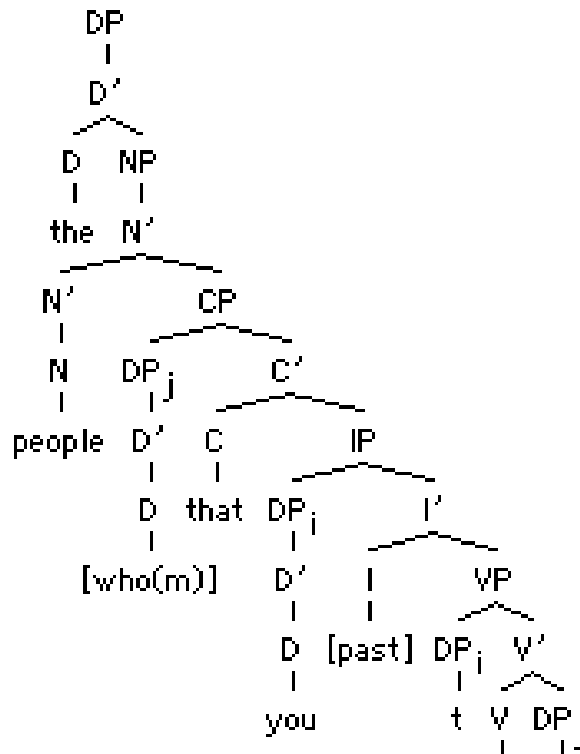
What are we talking about?

- i. The dentist_i (**who_i/ that / Ø**) I saw last week is a moron. (object relative clause)

Different underlying syntax and semantics:

- Pronouns fill NP slots
(referential semantics)
- Complementizers do not
(grammatical meaning)

- ii. The de week ...



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Topic of this talk

- Look at the **linguistic arguments** that have been brought to bear on the issue
- **Evaluate** these arguments both on...
 - theoretical grounds
 - empirical grounds

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Why should we care?

Theoretical implications of the decision

- Status of *that* is interesting in the context of relativization strategies in English
 - Relative pronoun strategy
 - Gap strategy

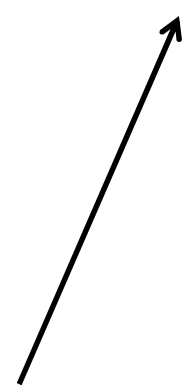
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What are we talking about?

- i. The dentist_i (that_i / who_i / \emptyset) I saw last week is a moron.
- ii. The dentist_i (that / who / * \emptyset) ____i saw my granny last week ...

Question:

If relativizer is *that*,
is that a case of gapping
(gap strategy of relativization)?
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Theoretical background:

RELATIVIZATION STRATEGIES

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Relativization (relativizing) strategies

“Languages use different strategies to encode the relative construction; we will refer to these as **relativizing strategies**.”

(Comrie & Kuteva in WALS)

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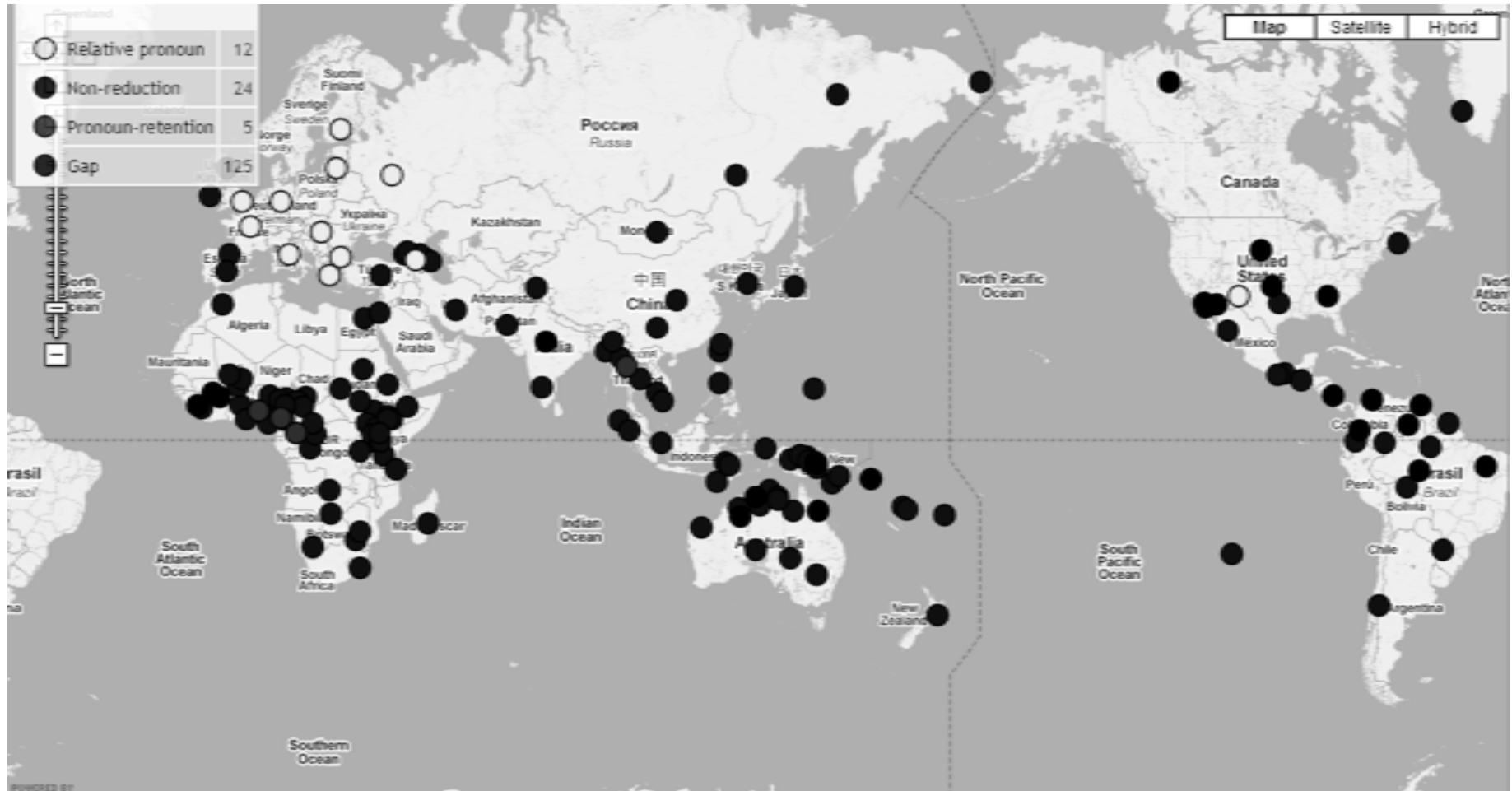
Relativization (relativizing) strategies

- ✘ Language employ different **morphosyntactic means** for different types of RC
- ✘ Different strategies for different **syntactic/semantic roles**
- ✘ **Relative pronoun strategy**
- ✘ **Gap strategy** (*gapping* for short)

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Relativization worldwide (WALS)

Relativization on subject role



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Relativization on subjects in German

- Relativizing strategy: **relative pronoun strategy**
 - predominant in Europe (Lehmann 1984)
 - atypical outside Europe

(1) German

Der Mann, [der mich begrüßt hat], war ein Deutscher.
man.NOM REL.NOM me greet.PTCP has be.3SG.PST one German
'The man who greeted me was a German.'

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Relativization on subjects in English

✘ Relativizing strategy: **relative pronoun strategy**

- i. The man **who** greeted me was a German
- ii. The man **who(m)** you met yesterday ...

✘ Notice that this would require that *that* is a **pronoun** as well.

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Relativization on subjects in English

✘ Relativizing strategy: relative pronoun strategy

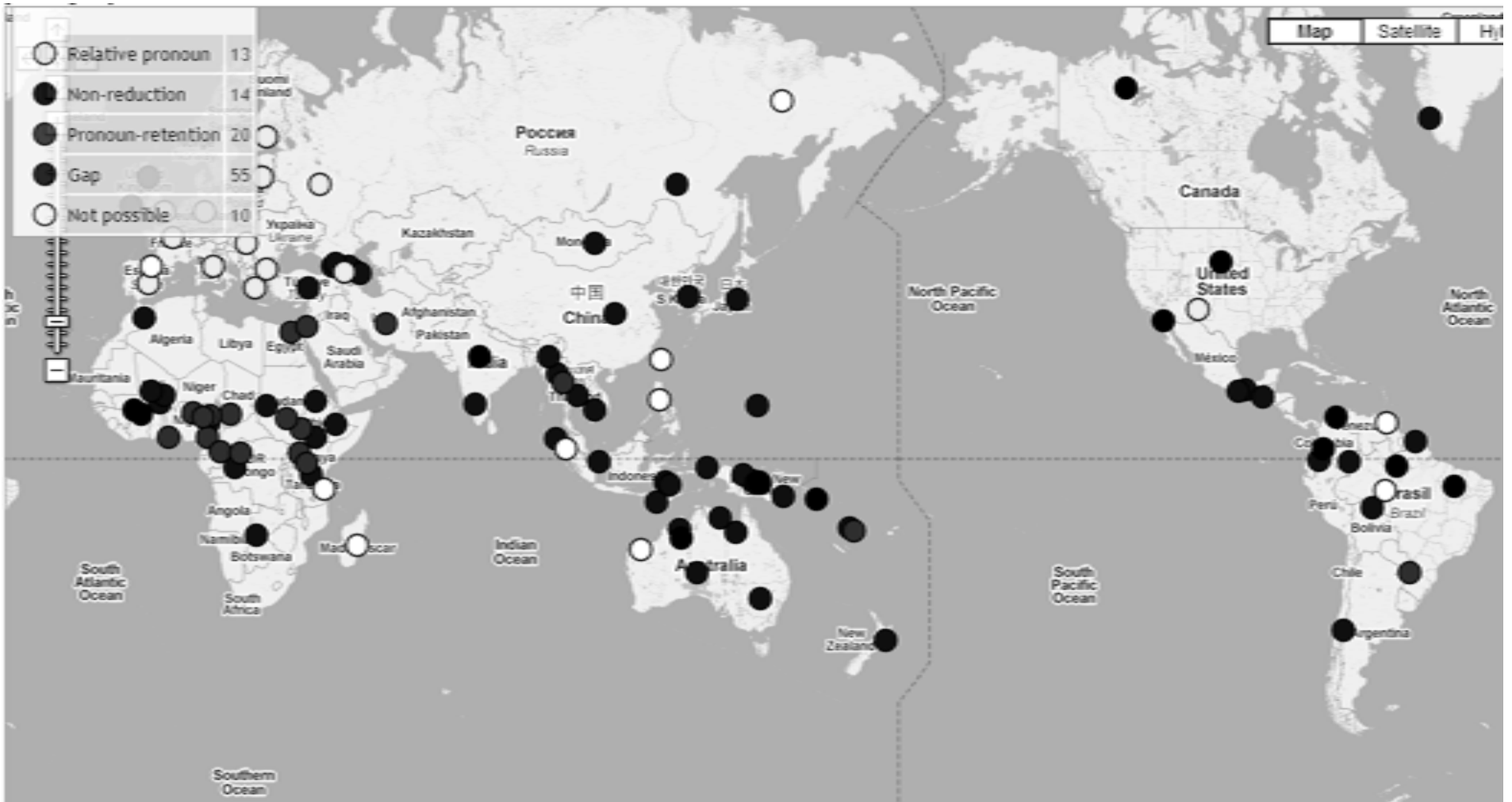
- i. The man **that** greeted me was a German
- ii. The man **that** you met yesterday ...

But now we don't have **case marking**

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Relativization worldwide (WALS)

Relativization on obliques



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Relativization on lower roles in English

✘ Relativizing strategy: **relative pronoun strategy**

- i. The man **whom/that/∅** you met yesterday
- ii. The man **whose/*that/*∅** papers you like ...

Relativization on lower roles in English

✘ Relativizing strategy: **relative pronoun strategy**

- i. The man **whom/that/∅** you met yesterday
- ii. The man **whose/*that/*∅** papers you like ...

Apparently *that* cannot be used with all RC types

Relativization on obliques (lower roles) in Korean

- Relativizing strategy: **gapping**

(6) Korean (Comrie 1989: 151)

[Hyənsik-i kɛ kā-ɬɪ ttäli-n] maktäki
Hyensik-NOM the dog-ACC beat-REL stick
'the stick with which Hyensik beat the dog'

Relativization on obliques (lower roles) in Korean

✘ Relativizing strategy: **gapping**

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[Hyənsik-i kɛ kā-ɬɪ ttäli-n] maktäki
Hyensik-NOM the dog-ACC beat-REL stick
'the stick with which Hyensik beat the dog'

- i. The man [\emptyset you met ___ yesterday] VP

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Relativization on obliques (lower roles) in Korean

✘ Relativizing strategy: **gapping**

(6) Korean (Comrie 1989: 151)

[Hyənsik-i kɛ kə-ɬɪ ttäli-n] maktäki
Hyənsik-NOM the dog-ACC beat-REL stick
'the stick with which Hyənsik beat the dog'

i. The man \emptyset you met ___ yesterday

*English has two strategies
(primary/secondary)*

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Relativization in English: Accessibility hierarchy

Accessibility hierarchy

Subject > Direct Object > Indirect Object > Oblique
> Genitive > Object of comparative

“If a language can relativize any position on the accessibility hierarchy with a *primary strategy*, then it can relativize all higher positions with that strategy”.

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Relativization in English

Accessibility hierarchy

Subject > Direct Object > Indirect Object > Oblique > Genitive > Object of comparative

- ▶ Relative PRN strategy w/ all roles
- ▶ Gapping w/ some but not all roles
(?subject, *genitive)

If *that* is treated as complementizer, then gapping would be possible w/ overt *that* (but not with zero)

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ARGUMENTS AGAINST
PRONOMINAL *THAT*

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Overview of Arguments

- Argument from wide range of antecedent types
- Argument from lack of upward percolation
- Argument from finiteness
- Argument from omissibility
- Argument from enclitics
- Argument from pied piping
- Argument from case marking

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Overview of Arguments

- ✘ **Argument from wide range of antecedent types**
 - ✚ If that were a pronoun, its use would be much wider than that of the uncontroversial pronouns
 - ✚ **Answer:** (a) *that* is in fact most frequent R and (b) argument is sound iff there are no confounding variables -> but there are reasons to believe that there are such variables (e.g. register)
- ✘ **Argument from lack of upward percolation**
- ✘ **Argument from finiteness**
- ✘ **Argument from omissibility**
- ✘ **Argument from enclitics**
- ✘ **Argument from pied piping**
- ✘ **Argument from case marking**

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Overview of Arguments

- ~~✗ Argument from wide range of antecedent types~~
- ✗ Argument from lack of upward percolation
 - ✚ If *that* were a pronoun, theorists need to stipulate that it has no genitive form and that it never occurs as a complement of a preposition
 - ✚ Answer: This may be true for standard English, but there is evidence from dialectal English that such forms exist
 - i. The pencil that's lead is broken
- ✗ Argument from finiteness
- ✗ Argument from omissibility
- ✗ Argument from enclitics
- ✗ Argument from pied piping
- ✗ Argument from case marking

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Overview of Arguments

- ~~✗ Argument from wide range of antecedent types~~
- ✗ (Argument from lack of upward percolation)
- ✗ Argument from finiteness
 - ✦ *That* cannot be inserted into non-*wh* relative infinitivals (*a knife that to cut with)
 - ✦ Answer: Obviously flawed (too demanding). Argument excludes uncontroversial pronouns (*which*)
- ✗ Argument from omissibility
- ✗ Argument from enclitics
- ✗ Argument from pied piping
- ✗ Argument from case marking

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Overview of Arguments

- ~~✗ Argument from wide range of antecedent types~~
- ✗ (Argument from lack of upward percolation)
- ~~✗ Argument from finiteness~~
- ✗ Argument from omissibility
 - + In contrast to its *wh*- counterpart *which*, *that* is very largely omissible
 - + Answer:
 - (a) what is the linguistic evidence for the idea that all RC w/o R involve silent *that*?
 - (b) argument is speculative (inference to the best explanation) -> other possibilities -> marking other contrasts (defining - non-defining RC)
- ✗ Argument from enclitics
- ✗ Argument from pied piping
- ✗ Argument from case marking

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Overview of Arguments

- ~~✗ Argument from wide range of antecedent types~~
- ✗ (Argument from lack of upward percolation)
- ~~✗ Argument from finiteness~~
- ~~✗ Argument from omissibility~~
- ✗ Argument from enclitics
 - ✦ In contrast to certain *wh*-variants, *that* is said to not combine with reduced auxiliary verbs.
 - ✦ Answer: Empirically false
 - ✦ Nothing in the road that's too short for its name [...] (S1A-023 337)
 - ✦ Anybody that's got an eye each side of their nose [...] (S1A-020 092)
 - ✦ The person that's affected is me [...] (S1A-026 075)
- ✗ Argument from pied piping
- ✗ Argument from case marking

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Overview of Arguments

- ~~✗ Argument from wide range of antecedent types~~
- ✗ (Argument from lack of upward percolation)
- ~~✗ Argument from finiteness~~
- ~~✗ Argument from omissibility~~
- ~~✗ Argument from enclitics~~
- ✗ Argument from pied piping
 - ✦ Unlike its closest *wh*- counterpart *which, that* does not allow pied piping.
 - ✗ *The city in that we are living ...
 - ✗ *The person with that we were talking
 - ✦ Answer: Again, argument is flawed as it prevents clear cases from counting as pronouns (*who*)
 - ✗ *The people in who we place our trust ...
 - ✗ *The person with who we are talking ...
- ✗ Argument from case marking

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Overview of Arguments

- ~~✗ Argument from wide range of antecedent types~~
- ✗ (Argument from lack of upward percolation)
- ~~✗ Argument from finiteness~~
- ~~✗ Argument from omissibility~~
- ~~✗ Argument from enclitics~~
- ✗ (Argument from pied piping)
- ✗ Argument from case marking
 - ✦ We may distinguish the syntactic category underlying *that* from that of the *wh*-form on the basis of the observation that only the *wh*-variant can signal case information
 - ✦ Answer: Well, how often do we actually get case marking in actual usage? Let's have a look...

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RELATIVIZER DISTRIBUTION IN ICE-GB R2

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Relativizers in ICE-GB R2

- ((,PRON(rel))) = 7,555 (4,528 spoken, 3027 written)

ICE:	1,061,263 words
Spoken part:	637,966 words
Written part:	423,581 words

$P(\text{pron.rel}) = 7555/1061263 = 0.007$

Spoken = $4528/637966 = 0.007$

Written = $3027/423581 = 0.007$

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Relativizers in ICE-GB R2: *that*

- ((,PRON(rel))) {*that*} = 2430 (1663 spoken, 767 written)

ICE:	1,061,263 words
Spoken part:	637,966 words
Written part:	423,581 words

P(that_rel) = 0.002

Spoken = 0.002

Written = 0.002

Relativizers in ICE-GB R2: *which*

- ((,PRON(rel))) {*which*} = 3668 (1967 spoken, 1701 written)

ICE:	1,061,263 words
Spoken part:	637,966 words
Written part:	423,581 words

P(which_rel) = 0.003

Spoken = 0.003

Written = 0.003

Relativizers in ICE-GB R2: *who*

- ((,PRON(rel))) {*who*} = 1724 (1108 spoken, 616 written)

ICE:	1,061,263 words
Spoken part:	637,966 words
Written part:	423,581 words

P(who_rel) = 0.0016

Spoken = 0.0017

Written = 0.0014

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Relativizers in ICE-GB R2: *whose*

- ((,PRON(rel))) {*whose*} = 127 (58 spoken, 69 written)

ICE:	1,061,263 words
Spoken part:	637,966 words
Written part:	423,581 words

P(*whose_rel*) = 0.00011

Spoken = 9.09e-05

Written = 0.00016

Relativizers in ICE-GB R2: *whom*

- ((,PRON(rel))) {*whom*} = 75 (35 spoken, 40 written)

ICE:	1,061,263 words
Spoken part:	637,966 words
Written part:	423,581 words

P(*whom_rel*) = 7.06e-05

Spoken = 5.48e-05

Written = 9.44e-05

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Relativizers in ICE-GB R2: zero

- $((\text{CL}(\text{zrel}, \neg\text{edp}, \neg\text{ing}, \neg\text{infin}))) = 1606$ (985 spoken, 621 written)

ICE:	1,061,263 words
Spoken part:	637,966 words
Written part:	423,581 words

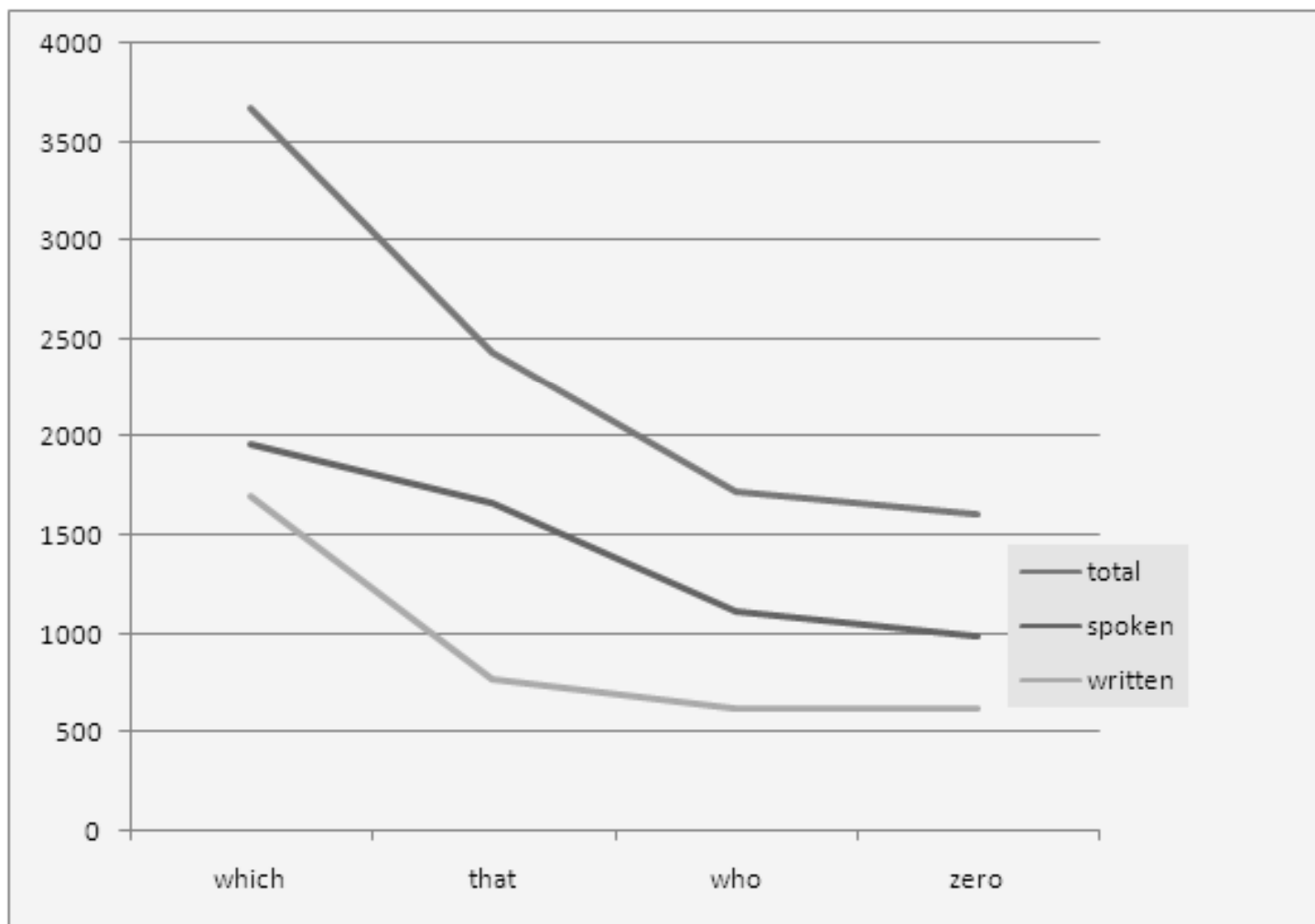
$P(\text{zero_rel}) = 0.001$

Spoken = 0.001

Written = 0.001

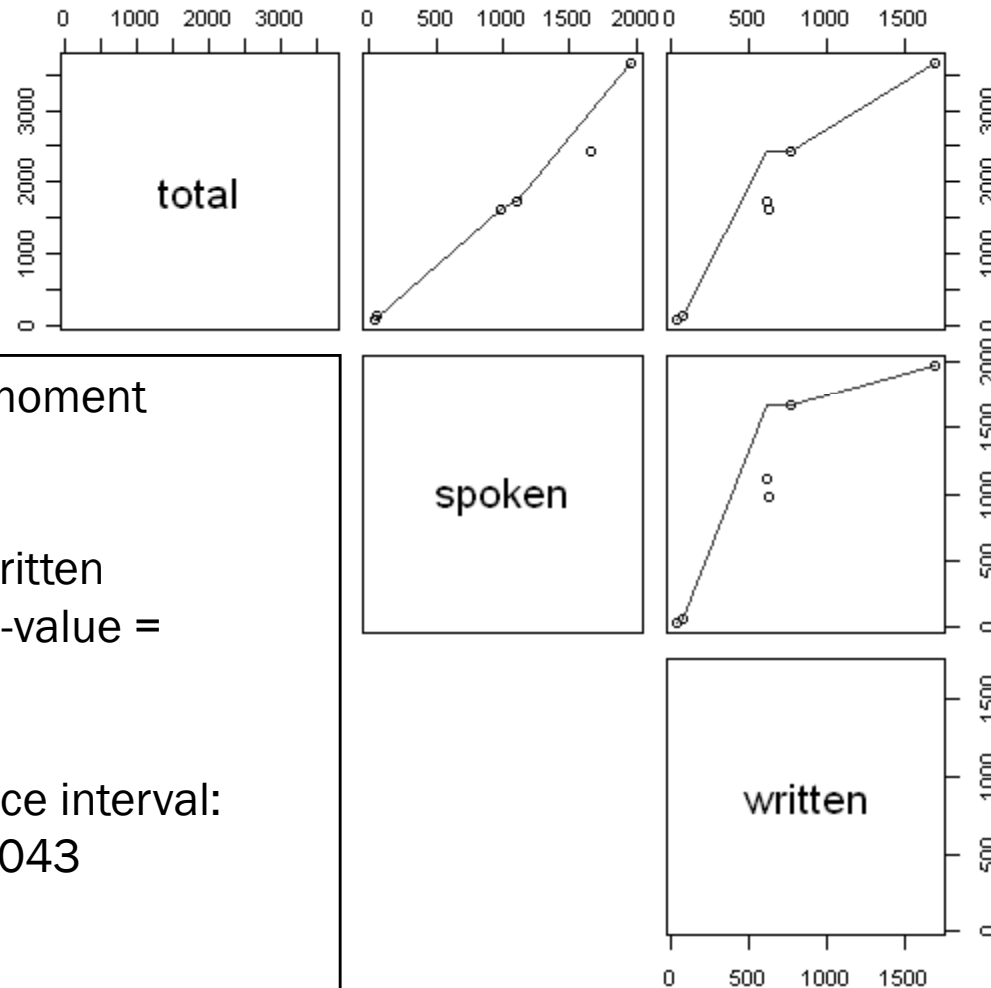
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Relativizer distribution



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Relativizer distribution (correlation)



Pearson's product-moment correlation

data: spoken and written
 $t = 4.6757$, $df = 4$, $p\text{-value} = 0.009478$

95 percent confidence interval:
0.4249231 0.9913043

sample estimates:
0.919421

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Overview of Arguments

- ~~✗ Argument from wide range of antecedent types~~
- ✗ (Argument from lack of upward percolation)
- ~~✗ Argument from finiteness~~
- ~~✗ Argument from omissibility~~
- ~~✗ Argument from enclitics~~
- ~~✗ Argument from pied piping~~
- ✗ Argument from case marking
 - ✚ We may distinguish the syntactic category underlying *that* from that of the *wh*-form on the basis of the observation that only the *wh*- variant can signal case information
 - ✚ Answer: Weak in usage-based grammars (very low induction capacity), case marked R-elements are rather infrequent

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Overview of Arguments

- ~~✖ Argument from wide range of antecedent types~~
- ✖ (Argument from lack of upward percolation)
- ~~✖ Argument from finiteness~~
- ~~✖ Argument from omissibility~~
- ~~✖ Argument from enclitics~~
- ~~✖ Argument from case marking~~
- ~~✖ Argument from pied piping~~

Arguments *for* pronominal *that*

✘ Argument from diachrony I:

✚ That is most common relative pronoun in Middle English

✘ Argument from diachrony II:

✚ that could introduce nominal RC

- i. Lose that is vast in your hands
- ii. lose what is fast in your hand

✘ Argument from coordination:

✚ *that*-relatives can be coordinated w/ *wh*-relative but not w/ zero-relatives

- i. *Every essay she's written and that/which I've read is on that pile.
- ii. Every essay which she's written and that I've read is on that pile.
- iii. Every essay that she's written and which I've read is on that pile.

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Conclusion

- ✘ We have investigated 7 arguments against pronominal *that* and seen that all of them are rather weak
 - + 5/7 can be rejected right away; 2/7 are stronger, but far from striking
- ✘ We have presented 3 independent arguments in favor of pronominal *that* hypothesis
 - + Force of 2/3 are debatable; the argument from coordination is quite strong

Implications for English relativization strategies:

- ✘ *that* = PRN: relative pronoun RP strategy applies
 - + high frequency of *that* strengthens the idea that RP is primary
 - + all zero variants involve the omission of some PRN
 - + Easier to live with certain empirical findings
 - ✘ ICE shows only *who* with indef prn heads (*everybody that* occurs once)
 - ★ everybody who is experiencing what you ... (subject REL)
 - ★ everybody I interview... (object RC)
- ✘ *that* = COMP: *that* relatives involve gapping
 - + high frequency of *that* is at odds with the idea that RP strategy is primary

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