

We'll burn that bridge when we get to it

Thematic coherence in identifying idiom blends

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Malaphors

He missed **the boat**

He dropped the boat on that one.

brain surgery

He **dropped** the ball

It's not rocket surgery!

rocket science

> Idiom blends

> "Malaphors" (Hofstadter & Moser 1989)

> Cf. Malaprop(ism): *infinity clause, right extrapolation*

> Cf. Coercive modification:

get your ugly ducks in a stupid row

What we learn from idioms

> Nature of formal linguistic representations

> Syntax (Fraser 1970, Nunberg et al. 1994, Bruening 2010)

The jig seems to be up.

#The jig wants to be up.

> Semantics (McGinnis 2002)

#John died to meet you.

> Prosody (Ashby 2006)

#She has eyes in the BACK of her head.

= non idiomatic

What we learn from idioms

> Processing

> Storage/Retrieval (Nordmann 2013)

Idioms show TOTT, and literal meaning is also activated.

> Comprehension (Gibbs & Nayak 1989)

#John kicked the bucket for 10 years.

> Neuro (Van Lacker 2006)

Idioms are right-hemisphere.

> Acquisition

> TESL (Grant & Bauer 2004, Vanderniet 2015)

'Core idioms' are the most difficult phrases for learners.

Idioms ability as a metric for overall language ability?

Malaphors as production errors

- > Errors are systematic and shed light on the reality of linguistic units (Fromkin 1973)

It's a spirative [spirant/fricative]

I wouldn't buy kids for the macadamia nuts.

- > Idiom blends are more likely to be produced if they share features (Cutting & Bock 1997)
 - > syntactic structure
 - > literal meaning
 - > figurative meaning

Corpus study

- > Dictionary of blends (Hatfield 2016)
- > Hand coded malaphors for thematic coherence
- > Thematic coherence: the 2 source idioms have the same idiomatic meaning

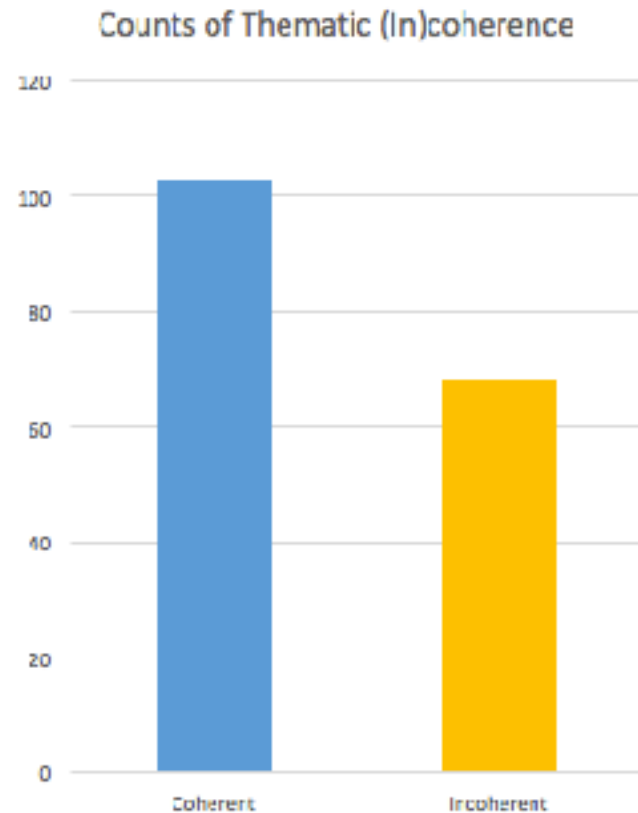
Coherent	Incoherent
that's the way the cookie bounces	there's no use crying over fish in the sea
it's like pulling blood	throw it under the rug
i'll chew his brain a little bit	you're a tough nut to follow
...going to do on a dime's notice	i was taken to the wolves

Corpus study

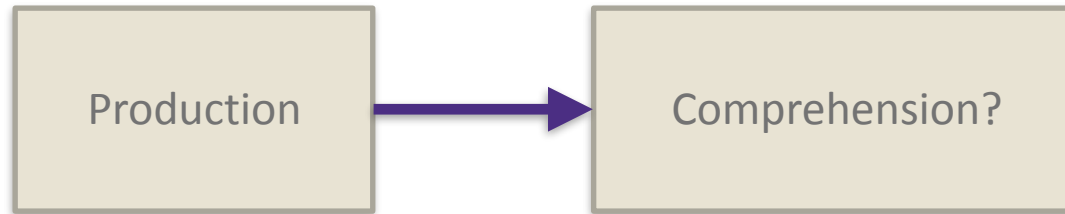
60.2% coherent

39.8% incoherent

Supports Cutting & Bock 1997



Guiding questions



- > **Can hearers distinguish blends of 2 idioms from single idioms?**
- > **Do hearers better recognize a phrase as a malaphor if it is thematically coherent?**

Method

Participants

- > **20 native speakers of English**
 - > **Mechanical Turk**
 - > **IP-limited to USA**
 - > **IP-screened for duplicates**
- > **Average time: 4'50"**

Method

Materials

- > **Sentence-rating task**

- > **4 conditions**

- > **Malaphor – Coherent**

- He isn't going to throw in the white flag.*

- > **Malaphor – Incoherent**

- She's sitting on her hands and needles.*

- > **Single idiom**

- They're going to hit the sack.*

- > **Not idiom**

- He ate the soup.*

- > **All stimuli simple sentences, randomized *he/she/they* subject**

- > **19 per condition**

Method

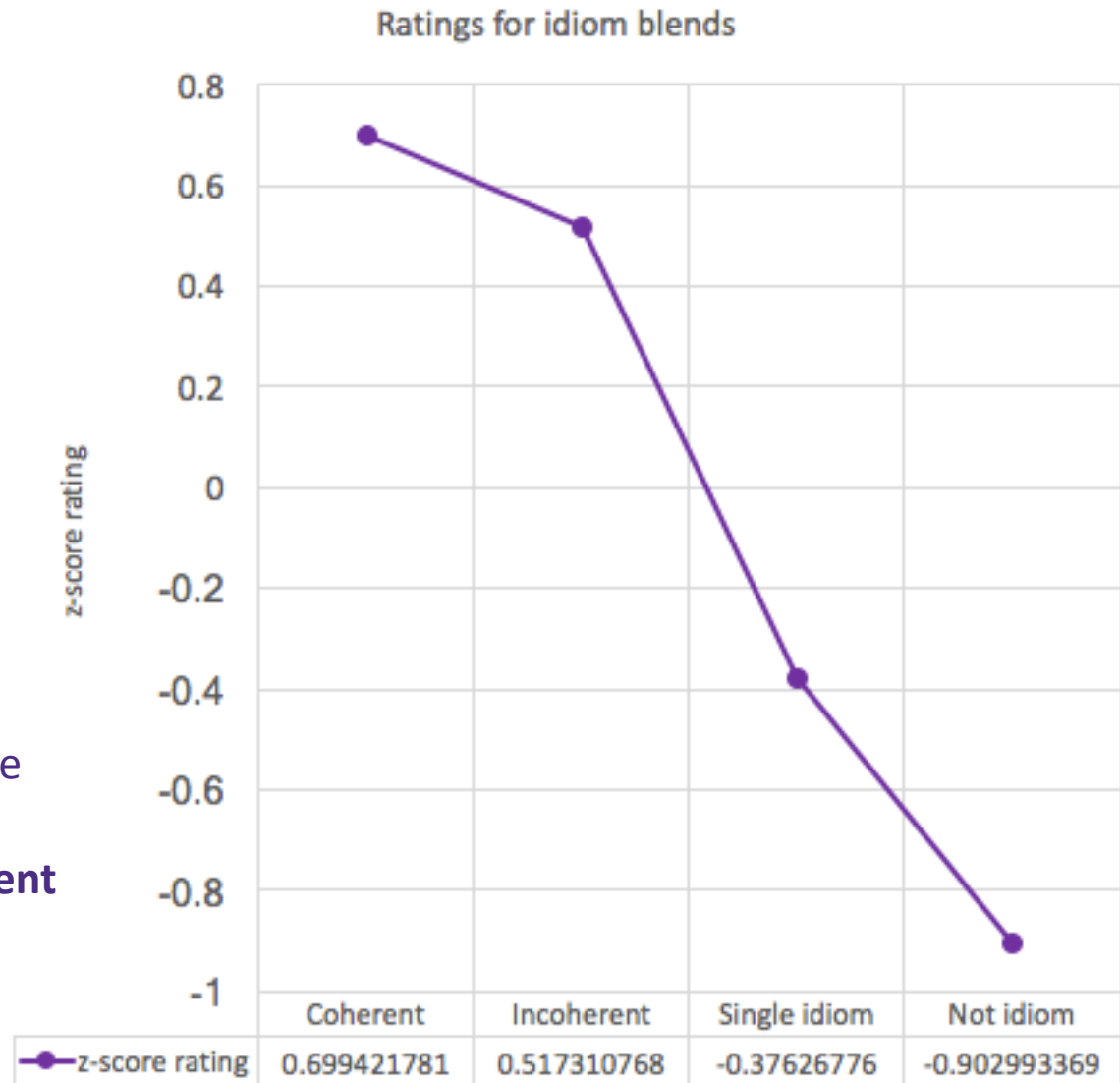
Procedure

- > **Sentence rating task**
- > **Pts shown examples and given instructions**
- > **"Is this an idiom blend?"**
 - > **Likert scale 1-7**
 - > **1 = "definitely NOT"**
 - > **7 = "definitely IS"**

Results

Ratings

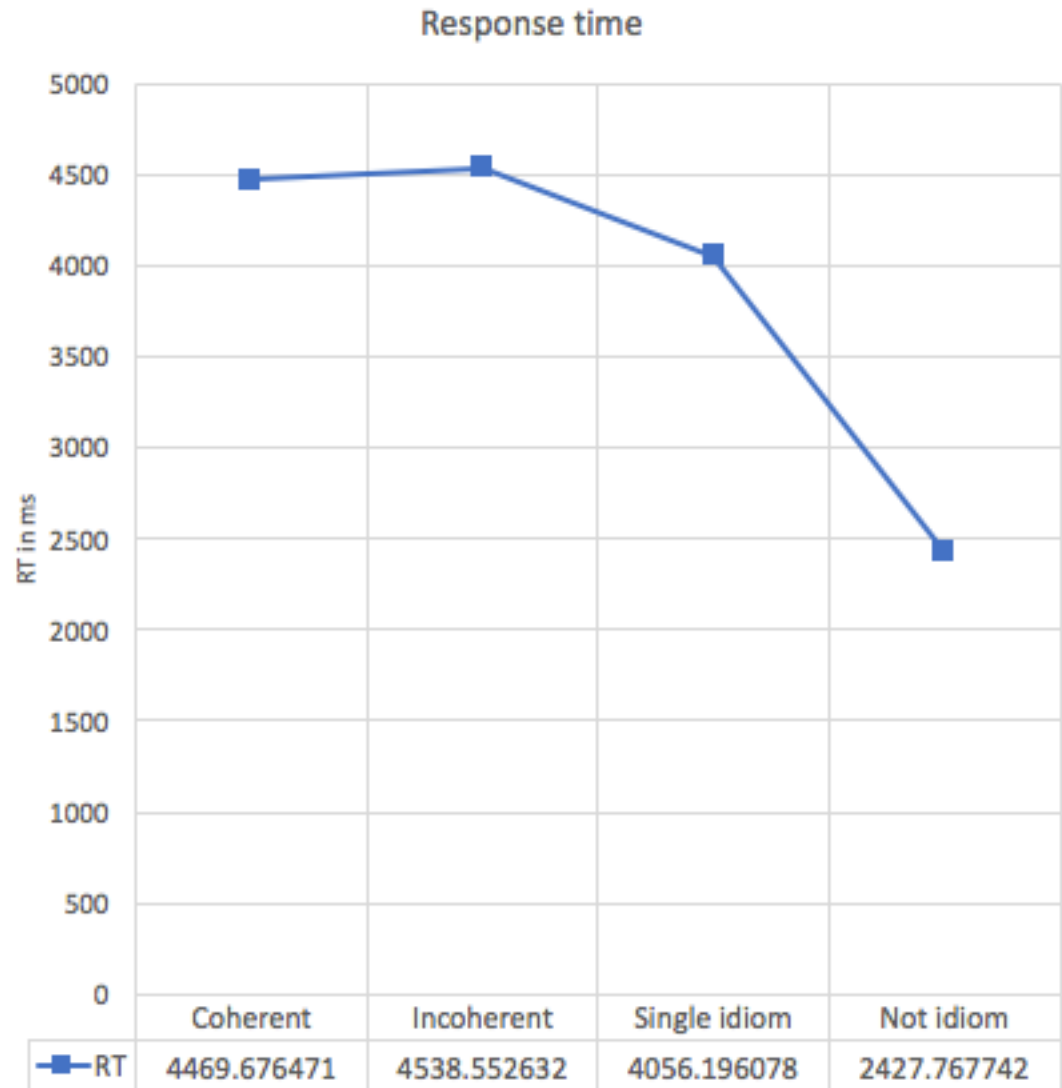
- Outliers removed
- All pairwise comparisons show significant difference ($p < 0.05$)
except Coherent-Incoherent



Results

Response time

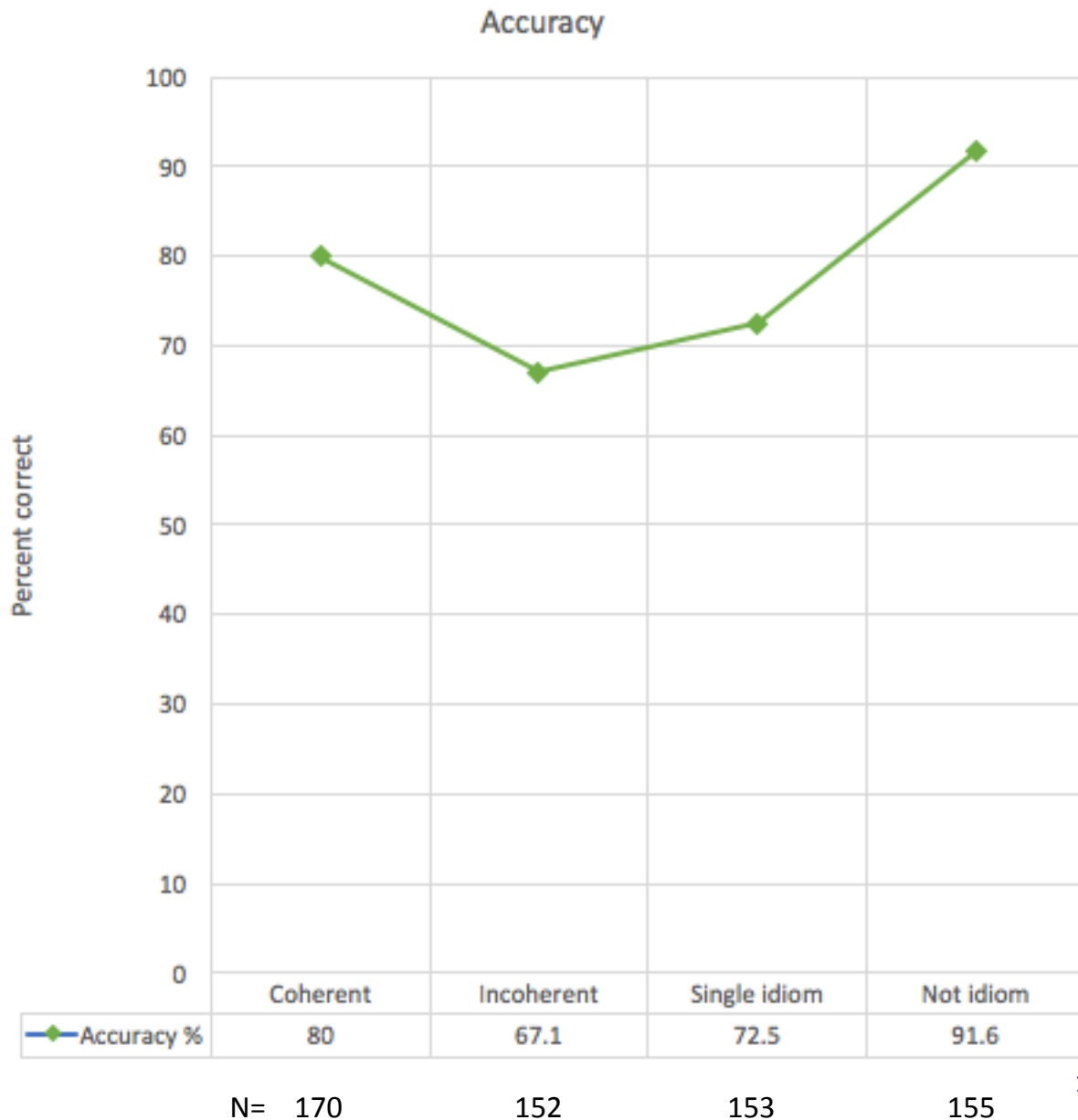
- Outliers removed
- Increased response time indicates deliberation before a decision.
- **Not idiom** was faster than all other conditions ($p < .05$). No other comparison is significant.



Results

Accuracy

- Overall:
77.8% accuracy
- Coherent-Incoherent decrease in accuracy
- Incoherent most difficult condition



Discussion

- > Can hearers distinguish blends of 2 idioms from single idioms?
Yes. Reliably, quickly, and accurately.
- > Do hearers better recognize a phrase as a malaphor if it is thematically coherent?
No. Thematic coherence not a significant factor in recognition.
- > However, incoherence is associated with a drop in accuracy.
- > 'Single idiom' condition was difficult.

Shift over time

ho__e in on a target

hone in on a target



Burke advises students to **hone** in on departments in which they are comfortable and already feel close to professors. [Swarthmore Phoenix]

553k

home in on a target



Bone cancer is sometimes treated with radioactive isotopes that **home** in on the bone. [NY Times]

261m

Shift over time

it's the 800-pound _____

800-pound gorilla



“China is **the cliché 800-pound gorilla in the room** that no one can ignore,” said Hayes, [The Hill]

340k

800-pound elephant



Data security: **the 800-pound digital elephant in the room** for physicians [Medical Economics]

199k

One of the most 'talked about' idiom shifts:

- Chicago Tribune 2011: http://articles.chicagotribune.com/2011-01-05/features/ct-tribu-words-work-gorilla-20110105_1_gorilla-idiom-elephant
- Huffington Post 2008: http://www.huffingtonpost.com/jeff-dorchen/where-did-100-pounds-of-g_b_97262.html
- Mentioned in Psychology Today 2011: <https://www.psychologytoday.com/blog/the-good-life/201109/the-800-pound-gorilla>

Research agenda

- > **Production and recall experiments on idiom blends.**
 - > **People tend to recall and read "lexical bundles" (in the middle of) faster, supporting a construction-based theory of the lexicon (Tremblay et al. 2011)**
- > **Self-paced reading tasks reveal "unexpected" components.**
- > **Can we distinguish real-occurring examples from made-up ones?**
- > **Collect more examples.**

To err is human, to malaphor is the question

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