

The theory of Lexical Priming and its role in understanding and communicating with metaphor

-A corpus study of *flame*

487 "scorn. Contact with Henry Grey had brought him t
 492 " single will was that of Richelieu, who, to weak
 495 " won't do it any more.' This contrition of the ch
 496 "; and, one day, new-created ye shall reappear. Oh
 500 "nt the afternoon addressing letters to the papers, striving to fan the FLAME of controversy. Every evening he listened for Rose's footstep o"
 504 "uccession. The vain fears and fond jealousies, the winds which fan the FLAME of love, when judiciously or artfully tempered, are both incomp"
 506 "er application should be made. 6. I came as he appointed, with all the FLAME of gratitude, and was told by his servant, that having found at"
 507 "ently each laboured to deepen the misunderstanding and set fuel to the FLAME of the quarrel. If the son were disinherited, consider the enor"
 510 "cate our young men in heroic virtue, and keep alive to future ages the FLAME of patriotism. And thus, too, to the aching heart of bereaved !"
 512 "e rising in another; and often, perhaps, at the last fading ray of the FLAME of genius, that may have almost dazzled the world with excess o"
 513 "apple of this country? How happened it that, during one whole month the FLAME of war was fanned by the newspapers, particularly by those supp"
 515 "ll upon the tinder of our wishes; then, they instantly ignite, and the FLAME of hope is kindled in a moment. But alas! that very morning, my"
 516 "m. The horror of the night on the Wreck had got him once more, and the FLAME of his passion was quenched in an instant. "The Dream!" he whis"
 518 "at, if for once, I preach thee quite awake? Who wants amusement in the FLAME of battle? Is it not treason to the soul immortal, Her foes in "
 519 "its commencement, and his influence grew during the ensuing years. The FLAME of rebellion, having spread through the Morea during the early "
 520 "nt, and signed to Mr. Neal to give him time. After a little delay, the FLAME of the sinking spirit leaped up in his eyes once more. Resolute"
 521 " it renders brighter, it does not therefore render more distinct. "The FLAME of passion, through the straggling soul Deep-kindled, shews acr"
 522 "aking they produce the opposite effect from that intended, causing the FLAME of national prejudice and animosity to burn more fiercely. But "
 523 "ak was before him, the lifted nostrils of the little man wide with the FLAME of anger. And Abarak, said, 'O youth, regard me with the eyes of "
 525 "t the protestant--religion within its own extensive establishment. The FLAME of the new religion seemed now to have reached all quarters, an"

waters, wh"
 nt no decl"
 'the most "
 ped, and k"



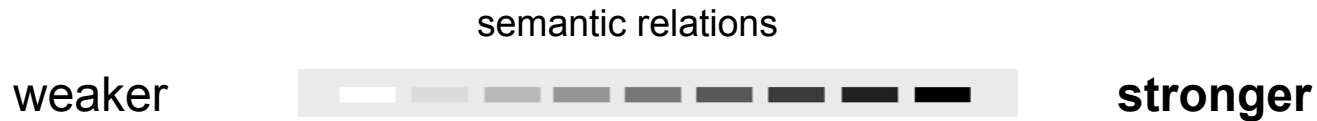
Katie Patterson
 K.J.patterson@liverpool.ac.uk

Research Questions

- How do we linguistically distinguish between metaphoric and non-metaphoric language?
- What are the linguistic characteristics that separate metaphor from other types of language?
- What can the results tell us about how we are primed to understand and use metaphors within language?

Motivation for current research

- Language as a social tool
- Words - more than one 'sense' (Charteris-Black, 2014)
- Continuum



- The Lexical Priming theory challenges the idea of a *single metaphoric cline* based on analysis of linguistic characteristics

Metaphors



Large middle hybrid group of 'potential metaphoricity'



Non-metaphors

Hybrid group of 'potential metaphoricity'

- Semantic → ... the firing did not cease, to set the town **in a flame**, and cut the women and children in pieces.
- Lexical
- Grammatical
- Pragmatic
- Simile

MORE SALIENT MEANING

Hybrid group of 'potential metaphoricity'

- Semantic
- Lexical
- Grammatical
- Pragmatic
- Simile



...entertain us with fantastic and **playful** jets of **flame**--but then its light is full, united, and steady...

CHOICE OF MODIFIER

Hybrid group of 'potential metaphoricity'

- Semantic
- Lexical
- Grammatical
- Pragmatic
- Simile



...his eyes were scattering fiery sparks;
sulphurous **flame stood** in his mouth, he
was frightfully feather-clad...

MATERIAL PROCESS DESCRIBING A STATE

Hybrid group of 'potential metaphoricity'

- Semantic
- Lexical
- Grammatical
- **Pragmatic**
- Simile



...and while one part of the company is employed **feeding** the **flame**, the others drive all the cattle in the neighbourhood...

CONTEXT

PERSONAL EXPERIENCE/EXPOSURE

JUDGEMENT

quench;
nourish;
wither

Hybrid group of 'potential metaphoricity'

- Semantic
- Lexical
- Grammatical
- Pragmatic
- **Simile**



...ran over the fields of medicine for a time **like flame** over the grass of the prairies.

DEFINED BY STRUCTURE

- Metaphors and similes are often working together...

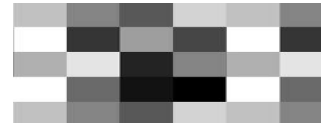
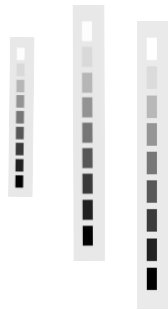
*"The seventeenth century traders went there for pepper, because the passion for pepper seemed to burn **like a flame of love** in the breast of Dutch and English adventurers about the time of James the First"*

X like Z

flame of love

Passion for pepper = love

- Continuum or....



...multiple aspects of 'metaphoricity' working together

- Writer/reader relationship

exploitation of linguistic conventions
personal judgement / interpretation

- *'some meaning is unobservable and exists in the minds of language users'*

(Philip, 2011, pp. 10)

“Since our experience of language suggests that communication takes place, there must be harmonising principles at work to ensure that each individual’s primings do not differ too greatly from those of others”

(Hoey, 2005 : 11)

The Lexical Priming Theory (Hoey, 2005)

“As a word is acquired through encounters with it in speech and writing, it becomes cumulatively loaded with the contexts and co-texts in which it is encountered, and our knowledge of it includes the fact that it co-occurs with certain other words in certain kinds of context.”

(Hoey, 2005: 8)

- **collocation**
- **colligation**
- **semantic association**
- **pragmatic association**

The Drinking Problem Hypothesis (Hoey, 2005: 82)

1. When a common sense of a **polysemous** word is primed for certain collocations, colligations and/or semantic associations, the rarer sense of that word will be primed to avoid them.
2. Where the senses are approximately as common as each other, they will both avoid each other's lexical patterns.
3. Where 1 and 2 do not apply, the effect will be humour, ambiguity, or a new meaning combining the two senses.

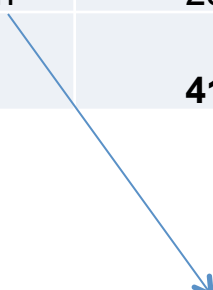
What about **metaphoric** meaning?

- Can metaphoric and non-metaphoric instances of a word or phrase be identified through their individual primings ?
- What are the implications for the instances which lie somewhere between metaphoric and non-metaphoric?

The Corpus

- Lexical Priming is based on the assumption that language is genre and context specific.

Subfolder	No. of texts	Running token size	% of whole corpus
1. Fiction	184	22,979,640	50.53
2. Non-Fiction	232	22,501,018	49.47
CORPUS TOTAL	416	45,480,658	100



Subsection	Text-Type	No. of texts	Running token size	% of Non-Fiction sub-corpus
2.1	Historical/Biographical	44	4,557,686	20.26
2.2	Handbooks/Manuals/Travel guides	54	5,245,462	23.31
2.3	Essays/Lectures	61	5,489,631	24.39
2.4	Journals/Letters/Memoirs	53	5,510,412	24.49
2.5	Religious	20	1,697,654	7.55
TOTAL		232	22,501,018	100

What is 'clear' metaphoric/non-metaphoric?

- Categorisation
 - Abstract vs concrete
 - Non-literal (Gibbs 2002)
 - Selection of concordance lines in each group tested within a questionnaire rating strength of metaphor on 3 point scale.
- 'Clearly metaphoric'
336 out of 1265
instances of *flame*
 - Non-metaphoric = 478
 - **Middle 'fuzzy' hybrid group = 451**

Some results...

metaphors

- human emotion
- physical body parts
- abstract nouns

non-metaphors

- semantically associated
- burning device
- physical body parts

Non-metaphoric		Metaphoric	
No.	Noun	No.	Noun
21	FIRE	24	EYES
23	CANDLE	31	LOVE
24	SMOKE	39	FIRE
28	LAMP	43	FACE
31	LIGHT	44	PASSION
54	WOOD	55	BREAST
61	AIR	62	HOPE
63	FACE	73	CHEEK S
68	MATCH	75	BOSOM
73	HAND	77	LIFE
81	HEAT	78	HEART
82	SPIRIT	93	LOVE'S
83	EYES	94	REBELLION
84	HANDS	96	SOUL
103	MOMENT	99	WORLD
105	SILK	102	EYE
107	COLOUR	115	FAITH
115	PLACE	129	DAY
121	SPIRITS	147	BLOOD
123	GAS	148	TONGUES
148	TUBE	151	BREAST S
149	EMBER S	156	HEAVEN
152	CANDLE S	157	CHRISTIAN
158	TORCH	160	REVOLUTION
163	MAN	162	WATER

Top 25 noun collocates

METAPHORS: The majority of abstract nouns occur in positions L2, R2 or R3.

*...Th' unconquerable Mind, and **Freedom's** holy **FLAME**. Woods, that wave o'er Delphi's steep, Isles...*

*far from despising them, if a pure **FLAME** of **patriotism** have reached their bosoms...*

*...**the FLAME** of my **hate** was fed by my jealousy. "Ay!" said I, sternly...*

NON-METAPHORS: concrete nouns almost always in position R3.

*... Held the letter which had come too late over **the FLAME** of the candle...*

*...Across **the FLAME** of **the candles**, he is looking full and steadily...*

*and was imperfectly lighted by **the FLAME** of an **occasional torch**..*

*a flame of
the flame of*

Dataset	Cluster	Rank position	Frequency	% of total lines
Metaphoric	A FLAME OF	5	8	2.38
	THE FLAME OF	1	36	10.71
Non-metaphoric	A FLAME OF	32	5	1.05
	THE FLAME OF	1	40	8.37
Middle group	A FLAME OF	11	9	1.12
	THE FLAME OF	6	14	2.24

Table 1. A/THE FLAME OF clusters amongst the datasets.

the - anaphoric
a - introduction of new element

metaphors

N	<i>The flame of + abstract noun</i>	Freq
12	THE FLAME OF LOVE	10
20	THE FLAME OF REBELLION	7
22	THE FLAME OF HOPE	4
23	THE FLAME OF PASSION	3
29	THE FLAME OF FIRE	3
37	THE FLAME OF LIFE	3
38	THE FLAME OF PASSION	3

THE FLAME OF top clusters

the flame of + abstract noun

No	Collocate	Freq	No	Collocate	Freq
31	LOVE	11	186	WAR	2
44	REBELLION	8	194	TEMPER	2
62	HOPE	7	202	DEVOTION	2
77	LIFE	5	204	EXTINCTION	2
94	PASSION	4	211	HATE	2
96	SOUL	3	216	FREEDOM	2
115	FAITH	3	222	ANGER	2
156	HEAVEN	2	247	MOMENT	2
160	REVOLUTION	2	248	PATRIOTISM	2
167	SEDITION	2	263	JOY	2

All abstract nouns used with FLAME OF

as certainly been drying up faster since the engagement: the FLAME of passion, I suppose. "I should think he is far from having light itself, as an unexplained wonder--its analogies with the FLAME of life--the modifications it receives from the faint gleam of " the forehead, and then went and stood in the pathway of the FLAME of Life. There was, I remember, to my mind something very t during a procession on the vigil of Easter (1282), spread the FLAME of insurrection over the whole island, and 8000 Franks were ivinced! "Lilian! Lilian!" I murmured to myself that name; the FLAME of hate was fed by my jealousy. "Ay!" said I, sternly, "murd' nctant with Henry Grey had brought him that rekindling of the FLAME of conscience, that medicinal stirring of the soul's waters, wh vill was that of Richelieu, who, to weaken Austria, fanned the FLAME of civil war in Germany, as he did in England, but lent no de- day, new-created ye shall reappear. Oh, let him in whom the FLAME of Devotion is ready to go out, who has never worshipped, a afternoon addressing letters to the papers, striving to fan the FLAME of controversy. Every evening he listened for Rose's footstep . The vain fears and fond jealousies, the winds which fan the FLAME of love, when judiciously or artfully tempered, are both incor ation should be made. 6. I came as he appointed, with all the FLAME of gratitude, and was told by his servant, that having found a ounting men in heroic virtue, and keep alive to future ages the FLAME of patriotism. And thus, too, to the aching heart of bereaved I g in another; and often, perhaps, at the last fading ray of the FLAME of genius, that may have almost dazzled the world with exces

non-metaphors

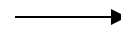
No	<i>flame of</i> + noun	Frequency
11	FLAME OF (THE) CANDLE	10
16	(THE) FLAME OF (THE) CANDLE	8
21	FLAME OF (THE) LAMP	7
45	(THE) FLAME OF (THE) LAMP	4
49	FLAME OF (THE) MATCH	4
50	(THE) FLAME OF (A) CANDLE	4
53	FLAME OF (A) CANDLE	4

FLAME OF top clusters

the flame of + determiner/pronoun
+ concrete noun

middle group

a/the flame of +



conflict between the two uses

and the other was jumping up and down as THE FLAME OF a lamp does when the oil is done. So, by the yellow gleam, much like that produced by THE FLAME OF spirits of wine. The water was white with the flames nearly a yard high, and resembling THE FLAME OF anthracite coal, only, the marble being in large part to support human breathing as to feed THE FLAME OF a candle. Where there is too little of it, the yellow gleam, much like that produced by THE FLAME OF spirits of wine. The water was white with the

'is no harm in my trying.' His breath fell like A FLAME OF fire on Stephen's ear, it was so hot. 'That was me into life with my body, as a product, like A FLAME, OF combustion? What will become of it after death, as white as snow; and His eyes were as A FLAME OF fire; and His feet like unto fine brass, as if they fell around the ladder, and streamed out like A FLAME OF blue light in the vessel's wake. My thoughts were

pronoun collocates

her, his, he

Pronoun	Non-Metaphors			Metaphors			Middle group		
	Freq.	Rank	%	Freq.	Rank	%	Freq.	Rank	%
HER	22	20	4.60	28	11	8.33	8	23	2.23
HIS	28	15	5.86	36	9	10.71	16	15	4.47
HE	21	21	4.39	8	23	2.38	11	20	3.07

Most frequent pronouns as collocates

Middle group

Pronoun	Freq.	Rank	%
HER	6	9	8.45
HIS	6	9	8.45
HE	5	8	7.04

Like pale parchment at the touch of FLAME; dull was HE as an animal fascinated by fear...

Like straw on fire, a great blaze of FLAME; HE perished in it...

...a tangled mass that surrounded HER forehead like a yellow FLAME.

OLD FLAME

Old modifies **flame** in the clusters HIS OLD FLAME, OLD FLAME OF, AN OLD FLAME and AN OLD FLAME OF

10 peated Mr. Ebenezer. "You saw Levison taken up--your old FLAME----" Afy stamped her foot in indignant interruption. "Take care"
11 opinion of himself; and so, all things favouring; the old FLAME blazed up wildly, and the young gentleman was more in love then"
12 st of all, the very person I wished most to avoid, my old FLAME Handassah, constituted the party. Fortunately, they did not per"
13 to the practical animal. So John sat alone with his old FLAME. He had become resigned to her perpetual lamentation and living
14 as a good deal frightened and affected at seeing his old FLAME in this condition. And she began, forthwith, to tell her story--"
15 engaged to be married--to a Lieutenant Osborne--a very old FLAME. "Is he a man in a line-regiment?" Captain Crowley asked, remem"
16 s a queer business. One would think Dick accuses some old FLAME of Carlyle's--some demoiselle or dame he daren't go against." "C"
17 ee his mother, Madame de Florac. I suppose she was an old FLAME of the Colonel's, for their meeting was uncommonly ceremonious "
18 clever to repine, and mentions us to Mr. Smith as 'An old FLAME of mine.' And shall I grieve that it is thus? and would I have "
19 son to the leddy o' Kirkbyres." "I remember her--an old FLAME of my brother's." "I ken naething about that, my lord; but he's"
20 ying the queer little apartment in which he found his old FLAME. One of her gowns hung over the bed, another depending from a h"
21 Mr. Parker's keeper, had fortunately got next to his old FLAME, Sukey Warseley; while Phil Rawson, the forester, who enacted W"

Jos, too, was a good deal frightened and affected at seeing **HIS OLD FLAME** in this condition. And she began...

*the queer little apartment in which **HE** found **HIS OLD FLAME**. One of **HER** gowns hung over the bed*

Frequent Verbs

metaphors

No	Cluster	Frequency
18	FANNED THE FLAME	8
19	CAUGHT THE FLAME	7
28	FAN THE FLAME	7
35	KINDLE THE FLAME	5

- semantically related to flame but specific to metaphors only
- semantically related due to conventionality?
- pragmatic implications

No	Collocate
76	BURST
118	CONSUMED
120	FEED
121	FED
172	SPREADS
195	SPARKLED
199	FLASHED
206	FLASHING
220	BLOWN
250	RADIANT
276	LEAPED

No	Cluster	Frequency
69	BURSTS INTO A	9
70	BURNS WITH A	8
71	BURST INTO A	7
84	BURNING WITH A	7

non-metaphors

Tentative conclusions...

- Separate **colligational structures;**
collocations;
semantic associations
- As a fixed group, evidence of specific grammatical structures are present, which distinguish the metaphors from middle/hybrid group instances of *flame*.
- Middle group is not uniform in linguistic characteristics

...and implications

- Evidence that the one-tier continuum doesn't address the complexity of metaphor.
- Understood and used based upon expectation or primings - extension of Hoey's (2005) theory.

Thank you for listening...

References

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