

GRAMMATICAL REPRESENTATION OF IDIOM CHUNKS IN LFG

One-Soon Her

Graduate Program in Linguistics

National Chengchi University

osh@nccu.edu.tw

Goal of the Paper

- To find a revealing and unified way to represent idiom chunks in the framework of Lexical-Functional Grammar (LFG)

Organization of the Paper

- 1. Characteristics of idioms
- 2. Parallel Planes in LFG
 1. Constituent Structure Solution
 2. Functional Structure Solution
 3. Argument Structure Solution
 4. ‘Conceptual Motivation’ Account
- 3. Discussion

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1. Characteristics of idioms

- Semantically: Non-literal Meaning
- Syntactically: Restricted Distribution

Non-literal Meaning

- Kick the bucket
 - literal: 踢桶子
 - idiomatic: 死

- 翹辮子
 - literal: stick up the braid
 - idiomatic: die

(Arbitrary) Syntactic Restrictions on Idioms

- 他翹了半天辮子 (*)
 - 他碰了半天釘子
 - 他吃了我半天豆腐
 - 他擔了半天心

 - 他翹了一根辮子 (*)
 - 他碰了一根釘子
 - 他吃了我一塊豆腐 (*)
 - 他擔了一顆心 (*)

 - 辮子，你別翹 (*)
 - 釘子，他別碰 (?)
 - 豆腐，他別吃 (*)
 - 心，你別擔
- He kicked the **political** bucket. (?)
 - He left no **legal** stones unturned.
 - You kissed her **black** ass.
 - I kicked his **bony little** ass.

 - He kicked **a** bucket. (*)
 - He left **a** stone unturned. (*)
 - You kissed **an** ass! (*)
 - I kicked **an** ass. (*)

 - **The bucket**, he kicked. (*)
 - **No stone** he left unturned. (?)
 - **Her ass**, you kissed. (*)
 - **His ass**, I kicked. (?)

Restricted Distribution of Idiomatic Components

- VO Compounds (words): zero distribution
- VO Idioms (phrases): restricted distribution
- VO phrases: full distribution

Examples of VO Constructions

- VO Compounds: 關心、綁腿、領事、失望、得意、從事、調劑、拿手、在行
- VO Idioms: 擔心、吃醋、吃豆腐、碰釘子、出洋相、放鴿子、跌破眼鏡
- VO Phrases: 換心、吃麵包、看電影、蓋房子、說故事、拿東西、買書

Full Range of Syntactic Variation

Focus: VO Idioms

- **A. Syntactic Behavior of O in VO idioms**
- eg., 1. Internal Modification of O: 他專吃嫩豆腐 (?老豆腐)
- 2. Movement of O: 老娘的豆腐，你少吃 (?豆腐，你少吃)
- 3. Anaphora of O: 你真會吃豆腐，吃得不著痕跡
(?他真愛擔心，擔得要生病了)
- **B. Syntactic Behavior of V in VO Idioms**
- eg., 1. Aspect: 他吃過我的豆腐
- 2. Compounding: 他吃不了你的豆腐。他的豆腐還真不好吃。
- **C. Speech Act**
- eg., 你去死！ (?你去翹辮子！)
Hold your horses! (? I am holding my horses!)

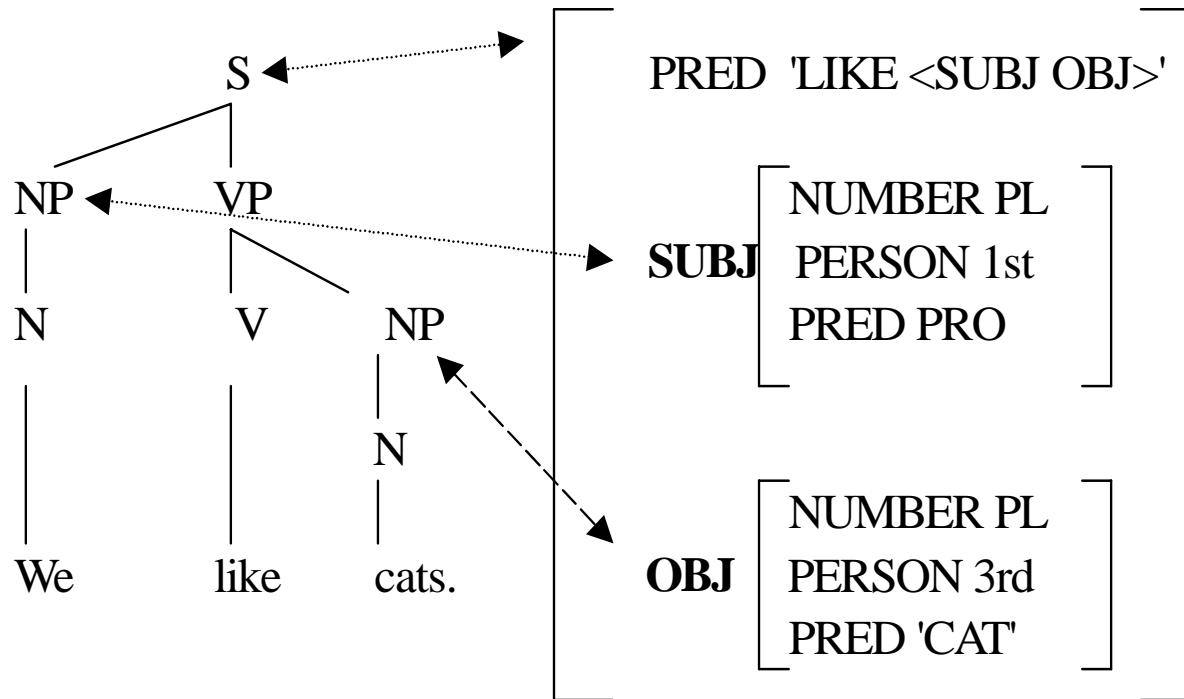
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2. LFG Parallel Planes of Grammatical Description

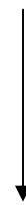
- Conceptual Structure
: <----- conceptual motivations
 - A-(rgument) Structure
: <----- lexical mapping theory
 - F-(unctional) Structure
: <----- functionally annotated
- PSR's
- C-(onstituent) Structure

c-structure ←→ f-structure



Lexical Mapping

- 殺 ‘kill’ < ag th > **argument structure**



- **<SUBJ OBJ> f-structure**

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2.1 C-Structure Solution

- Implied in Chao (1968) and LI & Thompson (1981), where VO idioms are treated as VO compounds

他在 [吃] _v [醋] _{NP}	‘he is eating vinegar’
他在 [吃醋] _v	‘he is being jealous’

- Fails because:
 - 他吃了半天的醋
 - 他吃誰的醋？
 - 他在吃什麼醋？
 - 他吃他女朋友的醋
 - • •

Conclusion on C-Structure

- Literal reading and idiomatic reading have the same c-structure

吃醋 ‘eat vinegar’ / ‘be jealous’

他 [_{VP} [_V吃] [_N醋]]

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2.2 F-Structure Solution

Huang (1990)

- 張三吃醋
'John eats vinegar'

[
SUBJ [PRED 'JOHN']
OBJ [PRED 'VINEAGER']
PRED 'EAT <SUBJ OBJ>
]

*醋 is referential

- 張三吃醋
'John is jealous'

[
SUBJ [PRED 'JOHN']
VMORF CHI
PRED 'JEALOUS <SUBJ>
]

*醋 is non-referential and
also not an OBJ

Problems with the f-structure solution:

1. Internal Modification of O in VO Idioms

- 張三碰了一根軟釘子 ‘John was subtly rejected’

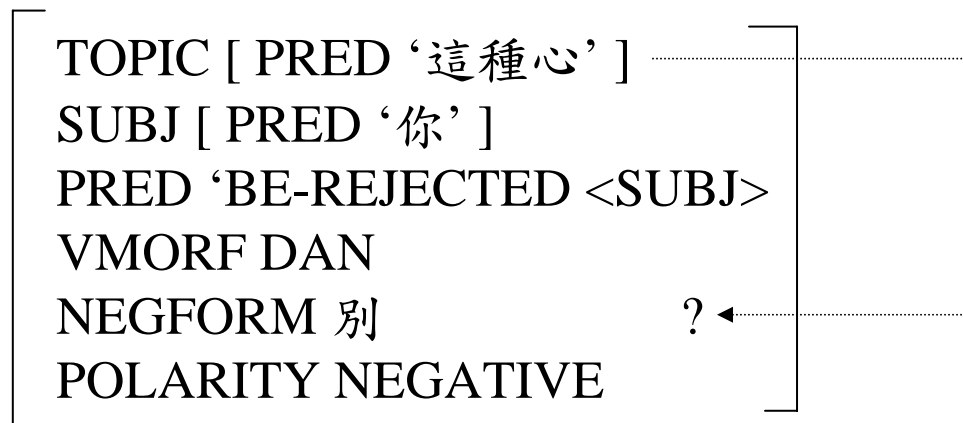
```
SUBJ [ PRED 'JOHN' ]  
PRED 'BE-REJECTED <SUBJ>  
VMORF PENG  
CLASS 根  
ADJUNCTS { [ PRED 'ONE'  
            [ PRED 'SOFT' ] }
```

1. There is a co-occurrence restriction of classifier 根 and 釘子
2. 軟 modifies 釘子, not 碰
3. 釘子 is referential

The f-structure solution fails to account for 1, 2, and 3.

Problems with the f-structure solution: 2. Possible Movement of O in VO Idioms

- 這種心，你別擔 ‘Don’t you worry about this’






1. 這種心 as TOPIC must long-distance control a missing function
2. 這種心 is referential

The f-structure solution fails to account for 1 and 2.

Problems with the f-structure solution:

3. Anaphora of O in VO Idioms

- 他拍馬屁拍__得嘴都酸了

- 她生氣生__得人都瘦了

- 他吃我豆腐，你也跟著吃__啊？


The f-structure solution fails to account for the fact that there must be an OBJ to serve as the antecedent

Final Challenge to the f-structure solution

- 住套房
- 住進總統套房
- The pot calling the kettle black
- Someone's left hand doesn't know what someone's right hand is doing

*What would be the f-structure representation of such semantically complex idioms?

Conclusion on F-Structure

- Literal reading and idiomatic reading have the same f-structure

吃醋 ‘eat vinegar’ / ‘be jealous’

張三 [VP [V吃] [N醋]]

SUBJ [PRED ‘JOHN’]
PRED ‘EAT <SUBJ OBJ>
OBJ [PRED ‘VINEGAR’]

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2.3 A-Structure Solution

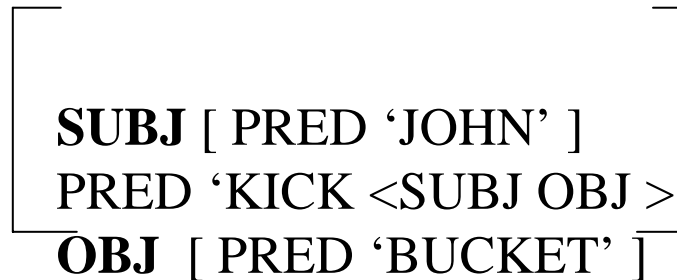
(LFG) Bresnan (1982), (HPSG) Sag & Wasow (1999)

John kicked the bucket.

- Kick < **ag** **th** > ‘踢’



< SUBJ OBJ >

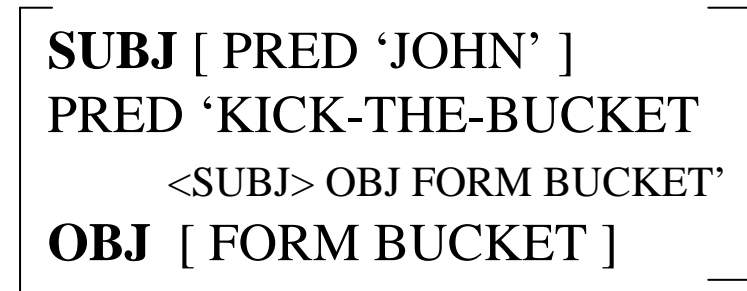


- Kick-the-bucket ‘死’

< **th** >



< SUBJ > OBJ_{FORM BUCKET}



***OBJ is non-thematic!**

Problems with the a-structure solution:

1. O in Idioms may undergo lexical processes (1)

- 殺 $\langle \text{ag} \quad \text{th} \rangle$
SUBJ OBJ 張三殺了雞
- Passive: $\langle \theta \quad \dots \rangle$
↓
 ϕ
- 殺 $\langle \text{ag} \quad \text{th} \rangle$
 ϕ SUBJ 雞(被張三)殺了
- A-structure solution: 吃醋/出洋相/丟臉 $\langle \text{th} \rangle$

*The a-structure solution thus (incorrectly) predicts that O in a VO idiom cannot be passivized

Problems with the a-structure solution:

1. O in Idioms may undergo lexical processes (2)

- 出洋相/丟臉 < ag th >
 ϕ SUBJ

洋相(被你)出盡了

臉都(被你)丟光了

Tabs were kept on Bill by the FBI.

His goose is cooked.

*‘洋相’, ‘臉’, ‘tabs’, and ‘his goose’ must be thematic arguments to be mapped to SUBJ.

Problems with the a-structure solution:
2. Subject idioms

- 飛 < th >
SUBJ 煮熟的鴨子飛了
- 想 < th prop >
SUBJ XCOMP 賴蛤蟆想吃天鵝肉
- The shit hits the fan. The cat is out of the bag.

*SUBJ, as part of the idiom, must be thematic and cannot be suppressed

Idiom Chunks and (Universal) Thematic Hierarchy

Kiparsky 1987, O'Grady 1998, Bresnan 2000

- ag > ben > exp/go > inst > pt/th > loc
- 爬到頭上、跳火坑、走後門、住套房、上西天
- go to town, put one's foot in one's mouth, sweep sth under the carpet, bury one's head in the sand

*Verbs combine more easily with roles at the lower end of the hierarchy

Final Challenge to the a-structure solution

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- 住進總統套房
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*What would be the a-structure representation of such semantically complex idioms?

Conclusion on A-Structure

- Literal reading and idiomatic reading have the same a-structure

吃醋 < ag th > ‘eat vinegar’ / ‘be jealous’

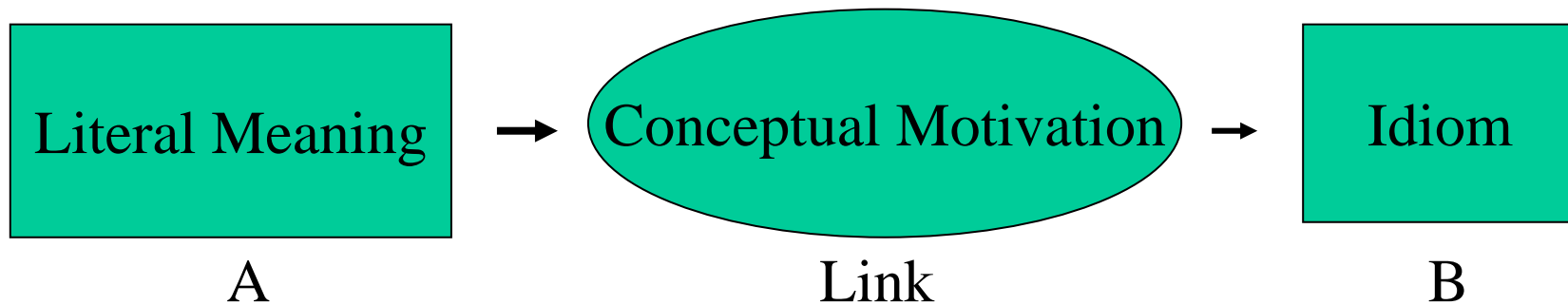
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2.4 Integrated ‘Motivation’ Account

(Lakoff 1987 and Her, Higginbotham, and Pentheorudakis 1994)

- **Idiomatic readings and literal readings are linked by conceptual motivations based on metaphor (eg. 吃豆腐), metonymy (eg. 閉眼), or mental images (eg. 跌破眼鏡).**



- **A must be expressed in a (lexically specified, conventionalized) syntactically restricted environment**

Lexical Specification of Idioms (in functional terms)

- 吃 CAT V **`(word)**
 PRED ‘吃 <ag-SUBJ th-OBJ>’

 [IF [SUBJ HUMAN =_c + **`(idiom)**
 OBJ PRED =_c ‘豆腐’
 [IF OBJ ADJS
 THEN OBJ ADJS =_c { [PRED ‘嫩’] }
]
 [IF OBJ POSS
 THEN OBJ POSS HUMAN =_c +
]
]

] THEN [IDIOM-LINK = 吃豆腐]
]

Examples of 'Sex is food' Metaphor

- 吃豆腐
- 眼睛吃冰淇淋
- 食色性也
- 垂涎她的美色
- 秀色可餐
- 獻上美女，請大王享用
- 蜜桃成熟時
- 嚐鮮
- 專吃童子雞
- 在家裡吃不飽，只好在外頭打野食了
- 結婚這麼多年，從來沒有偷吃過嗎？
- 看他那性感的身材，真恨不得一口吃掉
- 看得口水都要掉出來了
- 愛的蜜汁
- 櫻桃小嘴

Three Examples of Idioms

- | | | | | |
|-----------------|---|---|---|--------|
| □ A | → | (LINK) | → | □ B |
| 吃豆腐
*吃一塊豆腐 | | ‘Sex is Food’
(Metaphor) | | 調情 |
| 闔眼
*闔了兩分鐘的眼 | | Part of sleeping/death
(Metonymy) | | 睡覺 / 死 |
| 跌破眼鏡
*跌破一副眼鏡 | | (Mental image of
someone astonished) | | 非常意外 |

Conceptual motivation further extended



to kiss someone's ass → Mental Image → to flatter someone

↓
to brown-nose → ↑

跌破眼鏡 → Mental Image → 非常意外

↓
滿地找眼鏡 → ↑

不上道 → Metaphor → 不懂「規

矩」
↓
機車 → ↑

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- **Focus: Complexity of Syntactic Restrictions**

I. Internal Modification of O

1. numerical quantification (by a number + classifier, e.g., 一、二、幾 + 個、隻); eg., 碰了一根釘子。出了好幾個洋相。
2. mass quantification (by 不少、很多、or 一些)
eg., 那個傢伙吃了她不少豆腐。
3. adjective (without 的) eg., 碰了一個大釘子。專吃嫩豆腐。
4. adjective (with 的) eg., 賣了一個天大的關子。
5. 這種、那種、or 哪種; eg., 不要生這種氣。
6. definite article (這、那、這個、那個、這些、or 那些)
eg., 別傷這腦筋了。
7. time phrase with 的; eg., 她還在生昨天的氣。
8. duration phrase (with or without 的); eg., 她生了半天的氣。
9. frequency phrase (with or without 的); eg., 她生了幾次氣。
10. possessive NP (with 的); eg., 她生我的氣。
11. V-NP-O (like 9 but without 的); eg., 她喜歡吃我豆腐。

II. Movement of O

12. Bare topic (i.e. unmodified O topic); eg., 風頭，她出盡了。

13. Modified topic (i.e., modified O topic)
eg., 釘子，她碰了不少。 她的豆腐，你最好少吃。

14. (連) O 也... (unmodified O); eg., 她連便宜也不佔了。

15. (連) (modified) O 也... (like 13, O is modified)
eg., 她連我的豆腐也敢吃。

16. 把 O + V + Complement; eg., 把臉丟盡了。

17. (modified or not) O 被 NP V (+ Complement)
eg., 臉被你丟盡了。 她的飯碗也被你砸了。

18. cleft of O (bare, unmodified)
eg., 你吃的是熊心豹子膽嗎？

19. cleft of modified O; eg., 她丟的是你的臉，你不在乎？

20. pseudo-cleft of O (bare, unmodified)
eg., 洋相是你出的，跟我有什麼關係？

21. pseudo-cleft of modified O
eg., 她的飯碗是你砸的，你要負責。

22. relativized O (bare, unmodified)
eg., 你丟的臉還不夠嗎？ 她出的醜比你出的還要多。

III. Anaphora of O

24. verb copying (within a sentence): V1 + O + V1 + Complement

eg., 他拍她的馬屁拍了半天。

25. identical NP deletion (within a sentence): V1 + O + V2

eg., 你想抬槓，我就跟你抬。她吃醋，你也跟著吃啊？

26. discourse recovery (outside of a sentence)

eg., 拍馬屁（吹牛）可不是件簡單的事。拍（吹）的不好反而惹人討厭。真正會拍（吹）的人，拍（吹）的不輕不重，拍（吹）的對方服服貼貼的。

IV. Syntactic Behavior of V in VO Idioms

27. aspect marker (了、過、or 著); eg., 她露了兩手。她從沒打過岔。

28. resultative (了、掉、盡、光、下、到....etc.)

eg., 別擔心，這件事砸不了鍋的。
這件事她真是賣盡了關子，什麼都不說。

29. reduplication (with or without 一 or 了)

eg., 讓她喝喝西北風也好。你該收收心了吧。

30. pre-verbal morphological elements (e.g. 好、白、反...etc.)

eg., 這口飯還真不好吃。她白吃了半天的醋。

V. Speech Acts

4. Further Research

- 1. Are there ‘idiom classes’, like word classes?**
- 2. ‘Syntactic diffusion’?**
- 3. Compositional meaning?**

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