# Title

Nick Riches

Newcastle University

November 19, 2018

#### Title

#### Nick Riches

Main roles for Noun Phrases

Other roles for NPs phrases

Attributives Instruments

1/41

## Nick Riches

Motivation for argument structure

Argument Structure

Do we need argument structure?

**Propositions** 

Thematic relations (roles)

Remembering thematic relations

Further practice

Five minute exercise

Bibliography

Motivation for AS 5 min ex Valence

Arg. Structure

Definition
Determining valence

Probs with PA (1)
Probs with PA (2)
Probs with PA (3)

opositions nat is a proposition?

What is a proposition?
Thematic relation

Main roles for Noun Phrases EXERCISE Other roles for NPs Roles for other types of

Attributives Locatives

nstruments

A mnemonic

nin ev

ex 1/41

# 5 minute exercise

#### Title

Nick Riches

5 min ev

Probs with PA (3)

Main roles for Noun Phrases

Attributives

A mnemonic

Five min ex 2/41

What is wrong with the following sentences?

- 1. Jack gave Mary
- 2. Petula put the beans
- 3. Julie laughed Peter

## Valence

## Title Nick Riches

Valence

Probs with PA (1)

Main roles for Noun Phrases

Other roles for NPs

phrases Attributives

Instruments

Five min ex 3/41

1. Drive

2. Donate

3. Mix

4. Yawn

5. Slap

6. Rain

## Valence

# Title

Nick Riches

Valence

Main roles for Noun Phrases

Attributives

A verb 'begs to be completed into a sentence' (Tomasello, 1992)

The verb implies a certain number of participants (Valence)

Valence can range from 0 to 3.

## Valence

Kim & Thomson, 2000)

### Title

Nick Riches

Valence

Probs with PA (3)

Main roles for Noun Phrases

Other roles for NPs

Attributives

Five min ex 5 / 41

Psycholinguistic studies demonstrate that even when we hear

verbs in isolation we mentally represent the number of participants (e.g. Shapiro et al. 1987 lexical decision task, or

# Thematic relations (roles)

# Title Nick Riches

tivation for AS

5 min ex

Thematic relations (roles)

Definition

retermining valent

rojectionist Acc

Probs with PA (2) Probs with PA (3)

opositions

at is a proposition

ematic relations

Main roles for Noun Phrases EXERCISE

Other roles for NPs Roles for other type

hrases Attributives

Locatives Instruments

..

ve min ex

1. Jane fears Peter

2. Peter scares Jane

3. Paul liked the play

4. The play pleased Paul

5. Mary gave Pete a present

6. Pete received a present from Mary

## Title

## Nick Riches

Motivation for argument structure

Argument Structure

Do we need argument structure?

**Propositions** 

Thematic relations (roles)

Remembering thematic relations

Further practice

Five minute exercise

Bibliography

o min ex Valence

Thematic relation

Arg. Structure

Definition

Netermining valence

robs with PA (1)

Propositions

nat is a proposition?

Main roles for Noun Phrases
EXERCISE
Other roles for NPs

ohrases Attributives

ocatives nstruments

A mnemonic

. . .

. practice

6 / 41

#### Title

## Nick Riches

Definition

Probs with PA (3)

Main roles for Noun Phrases

Other roles for NPs

Attributives

Five min ex 7 / 41

Argument Structure = a level of linguistic representation that comprises

- 1. the number of essential participants
- 2. their roles in the sentence
- how those roles are ordered.

Essential participants are known as 'arguments'

#### Title

Nick Riches

Definition

Probs with PA (3)

Main roles for Noun Phrases

Other roles for NPs phrases Attributives

Instruments

Five min ex

### Title

Nick Riches

5 min ex

Valence

Arg. Structure

Definition

o we need AS?

Probs with PA (2)
Probs with PA (3)

opositions
hat is a proposition?

hat is a propositi

Thematic relations

Main roles for Noun Phrases

EXERCISE

Other roles for NPs

Roles for other ohrases Attributives

Locatives

mnemonic

Five min ex 9 / 41

Argument structure is partly semantic / partly syntactic:

- 1. Semantic level: roles specified by the verb
- 2. Syntactic level: ordering of roles.

NB, role of subject, in particular is fixed, e.g.

- (1) She gave Patrick a cake
- (2) She gave a cake to Patrick

SYNTAX

The man loaded the hay onto the wagon [with a pitch fork]

Syntactic frames

The man loaded the wagon with hay [with a pitch fork]

X VERB-ed Y onto Z | X verb Z with Y (Alternation)

mapping / linking

ARGUMENT

1 2 3

load <AGENT, PATIENT, LOCATION>

SEMANTICS

STRUCTURE

Valency / thematic relations / thematic roles



Title

Nick Riches

Motivation for AS

Thematic relations (roles)

rg. Structure

Definition

Determining valer

o we need AS?

Probs with PA (2

Probs with PA (3)

Proposit

What is a proposi

Thematic relations

Main roles for Noun Phrases

Other roles for NPs
Roles for other types

oles for other nrases Attributives

ocatives .

Instruments

urther practice

e min ex 10 / 41

### Title

Nick Riches

viotivation for A5

5 min ex

Thematic relations (ro

Arg. Structure

Determining valence

Do we need AS?

Probs with PA (1) Probs with PA (2)

Probs with PA (3)

ropositions

/hat is a proposit

ematic relation

Main roles for Noun Phrases EXERCISE

Other roles for N

Attributives

Instruments

rther practice

How do we determine **essential** participants?

Those which are obligatory?

- 1. \* She dropped the pen
- 2. \* She took the jacket

But most arguments can be rendered optional in certain contexts

- 1. She gives (money) to charity
- They all gave presents to Mary. Paul gave a pen (to Mary), Jenny gave a book (to Mary), and Brad gave a watch (to Mary)
- 3. COOKING INSTRUCTIONS: Chop (the carrots) and stir (them) into the sauce

lotivation for AS

5 min ex Valence

Arg. Structure

Determining valence

Projectionist Acc

Propositions

Vhat is a proposit

Thematic relations
Main roles for Noun Phrases
EXERCISE
Other roles for NPs

Attributives

ocatives nstruments

.....

ive min ex

min ex 12 / 41

## Title

Nick Riches

In addition, some verbs seem to elicit a wide variety of arguments

- 1. [ He ] paints [ walls ]
- 2. [ He ] painted [ the wall ] [ red ]
- 3. [ He ] painted [ the wall ] [ red ] [ with a paintbrush ] and [ some paint ]
- 4. [ This brush ] paints well

lotivation for AS

5 min ex Valence

rg. Structure

Determining valence

Projectionist Acc

Probs with PA (2) Probs with PA (3)

ropositions
/hat is a proposition?

Thematic relations

Main roles for Noun Phrases

EXERCISE
Other roles for NPs
Roles for other types of

Roles for other ty ohrases Attributives

ocatives nstruments

. .....

ive min ex

#### Title

Nick Riches

Determining valence

Probs with PA (3)

Main roles for Noun Phrases

Attributives

Extra-valent arguments which sound "added on"

- 1. She swam [ten lengths]
- 2. They laughed [the teacher] [out of the room]

### Title

Nick Riches

5 min ex

5 min ex Valence

Thematic relations (rol

Definition

Determining valence

o we need AS?

Probs with PA (2) Probs with PA (3)

positions

nat is a proposit

Thematic relations
Main roles for Noun Phrases

EXERCISE
Other roles for NPs

Other roles for I Roles for other t ohrases

Attributives Locatives

mnemonio

ther practice

min ex

1. Method 1: Corpus

2. Method 2: Introspection

These two methods can occasionally give different results!

So there is no foolproof method

## Title

### Nick Riches

Motivation for argument structure

Argument Structure

Do we need argument structure?

Propositions

Thematic relations (roles)

Remembering thematic relations

Further practice

Five minute exercise

Bibliography

min ex

Valence Thematic r

Arg. Structure

efinition etermining valence

Do we need AS?

Propositions

hat is a proposition?

Thematic relations

Main roles for Noun Phrases

EXERCISE
Other roles for NPs
Roles for other types of

Attributives Locatives

Instruments

A mnemonic

rther practice

min ex

# The Projectionist Account

it acts in a sentence?

Why not just use the meaning of the verb to determine how

Title

Nick Riches

Probs with PA (3)

Projectionist Acc

Main roles for Noun Phrases

Attributives

A mnemonic

# Problems with the Projectionist Account (1)

Title Nick Riches

Arg. Structure

Probs with PA (1)

Probs with PA (3)

Main roles for Noun Phrases

Attributives

Jane fears Peter

Peter scare Jane

The two verbs arguably have the same meaning but differ in order of realisation of arguments.

# Problems with the Projectionist Account (2)

Frame	Tell	Say
Verb + N	He told a story	She said her lines
Verb + N + N	She told him a story	*She said him a story
Verb + N + non-finite clause	He told her to go	* He said her to go
Verb + Clause	* She told she was leaving him	She said she was leaving him

The two verbs arguably have the same meaning but differ in terms of valence.

Title

Nick Riches

Motivation for AS

Valence

Arg. Structure

Definition

Do we need AS?
Projectionist Acc
Probs with PA (1)

Probs with PA (2) Probs with PA (3)

What is a proposition

Vhat is a propositi

Thematic relations
Main roles for Noun Phrases
EXERCISE

Other roles for Roles for other phrases

Attributives Locatives

A mnemonic

urther practic

e min ex 18 / 41

# Problems with the Projectionist Account (3)

Nick Riches

Title

Motivation for AS
5 min ex

Arg. Structure

Determining valer

Projectionist Acc

Probs with PA (2)

Propositions

What is a proposition

Thematic relations

Main roles for Noun Phrases

Other roles for NPs

oles for other ty hrases

Locatives

. .....

min ex

1. He gave a book to Mary He gave her the book

2. He donated a book to the library \*He donated the library a book

The two verbs have closely related meanings but differ in terms of their *alternation* characteristics (ability to occur in multiple frames)

## Title

## Nick Riches

Motivation for argument structure

Argument Structure

Do we need argument structure?

**Propositions** 

Thematic relations (roles)

Remembering thematic relations

Further practice

Five minute exercise

Bibliography

Motivation for AS

Valence

Thematic

arg. Structure

etermining valence

we need AS?

Probs with PA (2)
Probs with PA (3)

1 1003 WILLI 1 A (3)

Propositions
What is a proposition?

Vhat is a proposition?

Main roles for Noun Phrases EXERCISE

Other roles for NPs Roles for other type phrases

Attributives Locatives

Instruments

A mnemonic

urther practice

ve min ex

A *mental scene* involving at least one *entity* (or argument) participating in an event or situation



A tiger

**ENTITY** 



A tiger creeping through the jungle

= A PROPOSITION

Title

Nick Riches

Motivation for AS

5 min ex

Thematic relations (roles)

g. Structure

Determining vale

o we need AS?

Probs with PA (1)

Probs with PA (3)

ropositions

What is a proposition?

I hematic relations

Main roles for Noun Phrases

EXERCISE

Other roles for NPs Roles for other type phrases

Attributives

Instruments

A mnemo

Further practice

ve min ex

## Title

Nick Riches

Contains those entities which make the most important contributions to the **truth conditions** of the sentence

- The dog chased the cat
   The robot washed the cat
   TRUTH CONDITIONS HAVE COMPLETELY
   CHANGED
- The dog chased the cat →
   The dog quickly chased a cat
   MINOR CHANGE TO TRUTH CONDITIONS

Notivation for AS

5 min ex Valence

Arg. Structure

Definition

o we need AS?

Probs with PA (2) Probs with PA (3)

opositions

What is a proposition?

Thematic relations
Main roles for Noun Phrases
EXERCISE
Other roles for NPs

hrases
Attributives

Locatives Instruments

. .....

ve min ex

ex 21 / 41

Title

Nick Riches

1. Proposition chase(dog,cat)

## 2. Sentence

- 2.1 The dog chased the cat
- 2.2 It chased the cat
- 2.3 The cat was chased by the dog

## 3. Utterance

A: Is your dog energetic?

B: Well, it chases the neighbour's cat every day!

We need propositions to explain how different surface forms (e.g. 2) can have the same underlying meaning.

The proposition IS the underlying meaning.

otivation for AS

5 min ex

Thematic relations (roles)

rg. Structure

Determining valen

Determining valence

jectionist Acc

Probs with PA (2)

opositions

What is a proposition?

nat is a proposition?

Thematic relations

Main roles for Noun Phrases

EXERCISE

Other roles for NPs Roles for other type

nrases Attributives

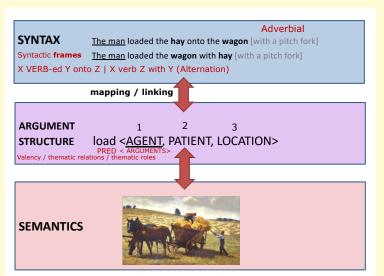
Locatives Instruments

Instruments

. .....

.

nin ex 22 / 41



Title

#### Nick Riches

Notivation for AS

. . .

Thematic relations (roles)

Arg. Structure

Definition

Determining valence

Projectionist Acc

Probs with PA (2

Probs with PA (3)

#### Propositi

### What is a proposition?

Main roles for Noun Phrases
EXERCISE
Other roles for NPs

Roles for other phrases

Attributives

ocatives nstruments

A mnem

Further practice

e min ex 23 / 41

## Title

## Nick Riches

Motivation for argument structure

Argument Structure

Do we need argument structure?

Propositions

Thematic relations (roles)

Remembering thematic relations

Further practice

Five minute exercise

Bibliography

Notivation for AS min ex

Valence

Thematic rel

Definition

we need AS?

Probs with PA (3)

/hat is a proposition?

Thematic relations

Main roles for Noun Phrases

EXERCISE
Other roles for NPs
Roles for other types of

Attributives Locatives

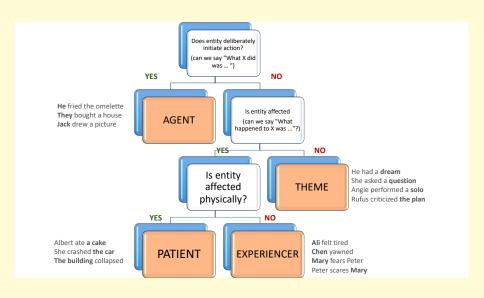
Instruments

A mnemonic

...

Five min ex 23 / 41

## Main roles for Noun Phrases



## **EXERCISE**

#### Title

#### Nick Riches

1. Charles crashed the car

2. Mavis heard the noise

3. The noise startled Mavis

4. The tree fell down in the storm

5. Ali considered the exciting proposal

6. Fatimah hated the start of term

7. The swing broke under his weight

8. The doctor felt the patient's foot

9. I like having a bath with my clothes on

10. Jack liked Susan's holiday snaps on Facebook.

Motivation for AS

5 min ex

Thematic relations (roles)

rg. Structure

Determining vale

Determining valence

we need AS?

robs with PA (1)

Probs with PA (3)

opositions

at is a proposition

ematic relation

Main roles for Noun Phrases EXERCISE

Other roles for NPs

Roles for othe phrases

Attributives

Locatives Instruments

· milemonie

rther practice

min ex 25 / 41

## **EXERCISE**

#### Title

#### Nick Riches

Motivation for AS

Valence

Thematic relations (roles

rg. Structure

Determining vale

o we need AS?

Projectionist Acc

Probs with PA (2) Probs with PA (3)

ropositions

/hat is a proposit

Thematic relations
Main roles for Noun Phrases
EXERCISE

Other roles for NPs Roles for other type

Koles for oth ohrases

Locatives

Instruments

rther practice

1. Charles AG. crashed the car PAT.

2. Mavis EXP. heard the noise TH.

3. The noise TH. startled Mavis EXP.

4. The tree PAT fell down in the storm

5. Ali AG. considered the exciting proposal TH.

Fatimah <sub>EXP.</sub> hated the start of term <sub>TH.</sub>

7. The swing PAT. broke under his weight

8. The doctor AG. felt the patient's foot TH.

9. I EXP. like having a bath TH. with my clothes on

10. Jack AG. liked Susan's holiday snaps TH. on Facebook.

# Other roles for Noun Phrases

Title

Nick Riches

Motivation for AS

Thematic relations (roles)

Definition
Determining valence

Do we need AS?

Projectionist Acc

Probs with PA (2) Probs with PA (3)

Propositions
What is a proposition?

Thematic relations

Main roles for Noun Phrases

Main roles for Noun Phrases EXERCISE Other roles for NPs

Other roles for NPs
Roles for other types of

Attributives

mnemonic

min ex

**Benefactive** is the role typically given to Indirect Object Noun Phrases, e.g.

- 1. She gave [him BEN.] [a book PAT.]
- 2. She bought [ a book PAT. ] [ for him BEN. ]

# Other roles for Noun Phrases

## Title

Nick Riches

Probs with PA (3)

Main roles for Noun Phrases

# Other roles for NPs

Attributives

Five min ex 28 / 41

# **Possessor** is the owner of something

- 1. [ Jack POSS. ] has/owns a Ferrari
- 2. The house belongs to [Martha POSS.]

# Roles for other types of phrases

Title

Nick Riches

5 min ex

Arg. Structure

Definition

Determining vale

Do we need AS?
Projectionist Acc

Probs with PA (2) Probs with PA (3)

ropositions

Vhat is a propos

Thematic relations
Main roles for Noun Phrases
EXERCISE

Other roles for NPs Roles for other type

Roles for other phrases Attributives

Locatives Instruments

. .

min ex

Phrases which describe a property of something else are called ATTRIBUTIVES

ATTRIBUTIVES are mapped to Cs and Co.

- 1. Janice feels happy ATTR
- 2. Losing at bingo makes Martha sad ATTR
- 3. Jack is in a mood ATTR

# Roles for other types of phrases

Title

Nick Riches

5 min ex

Valence

Definition

Determining vale

o we need AS?
rojectionist Acc

Probs with PA (2) Probs with PA (3)

opositions

nat is a proposit

Thematic relations

Main roles for Noun Phrases

EXERCISE

EXERCISE
Other roles for NPs
Roles for other types of

Attributives Locatives Instruments

memome

Five min ex 30 / 41

We can often make questions about attributives using the question word <u>how</u>, e.g.

1. Q: How does janice feel? A: Happy

# Roles for other types of phrases

Title Nick Riches

Main roles for Noun Phrases Other roles for NPs

Attributives

Locatives

Phrases which describe locations are sometimes called LOCATIVES, e.g.

- 1. Jason is in the park LOC
- 2. Pat loaded the hay onto the wagon LOC

1. The girls played baseball in the park

A genuine argument?

### Title

Nick Riches

Probs with PA (3)

Main roles for Noun Phrases

Attributives Locatives

A mnemonic

Five min ex 32 / 41

Title

Nick Riches

Motivation for AS

5 min ex

Thematic relations (role

Definition

Determining valen

Do we need AS?

Probs with PA (1)
Probs with PA (2)
Probs with PA (3)

robs with PA (3)

positions

at is a proposition

Thematic relations
Main roles for Noun Phrases
EXERCISE

XERCISE Other roles for NPs coles for other types of

Attributives

Instruments

..

Five min ex 33 / 41

We can make questions about locatives using the question word where, e.g.

1. Q: Where is Jason? A: In the park.

Title

Nick Riches

5 min ex Valence

Definition

Projectionist Acc

Probs with PA (2) Probs with PA (3)

opositions

at is a proposition

Thematic relations
Main roles for Noun Phrases
EXERCISE

XERCISE Other roles for NP Coles for other typ hrases

Attributives Locatives

A mnemonic

ther practice

Five min ex 34 / 41

An instrument is an object used to perform and action, e.g.

1. Angela covered the food with a cloth INSTR

### Title

Nick Riches

Probs with PA (3)

Main roles for Noun Phrases

Attributives

Instruments A mnemonic

## A genuine thematic relation?

- 1. He hammered the nail (? with a hammer)
- 2. She **filed** her nails (with a nail file).

### Nick Riches

Motivation for argument structure

Argument Structure

Do we need argument structure?

**Propositions** 

Thematic relations (roles)

Remembering thematic relations

Further practice

Five minute exercise

Bibliography

5 min ex Valence

Valence Thomatics

Thematic relations (roles)

Definition
Determining valence

o we need AS?

Probs with PA (3)

/hat is a proposition?

Thematic relations

Main roles for Noun Phrases

EXERCISE

Other roles for NPs Roles for other type phrases

Attributives Locatives

Instruments

A mnemonic

ther practice

Five min ex 35 / 41

### Nick Riches

Valence Thematic relations (roles)

Definition

Determining vale

Projectionist Acc

Probs with PA (2) Probs with PA (3)

ropositions

at is a proposition

nat is a proposit

Thematic relations

Main roles for Noun Phrases

EXERCISE

Other roles for NPs

Other roles for Roles for other

Attributives Locatives

Instruments

A mnemonic

....

min ex

After Eating Peas All Tiny Babies Avoid Laughing In Public AGENT, EXPERIENCER, PATIENT, THEME, BENEFACTIVE, ATTRIBUTIVE, LOCATIVE, INSTRUMENT, POSSESSOR

#### Nick Riches

 ${\sf Motivation} \ {\sf for} \ {\sf AS}$ 

Valenc

Thematic relations (roles)

Arg. Structure

Determining vale

Do we need AS?

Projectionist Acc Probs with PA (1)

Probs with PA (3 Probs with PA (3

Propositions
What is a proposition?

What is a proposition?

Main roles for Noun Phrases EXERCISE

Other roles for NPs Roles for other types phrases

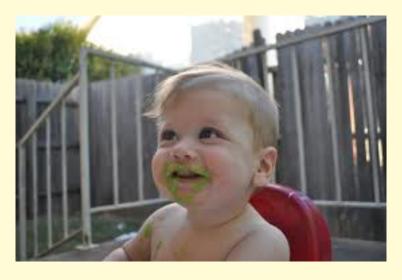
Attributives

Locatives Instruments

### A mnemonic

urther practice

Five min ex 37 / 41



### Nick Riches

Motivation for argument structure

Argument Structure

Do we need argument structure?

**Propositions** 

Thematic relations (roles

Remembering thematic relations

Further practice

Five minute exercise

Bibliography

min ex

alence hematic re

rg. Structure

ojectionist Acc obs with PA (1)

Propositions

nat is a proposition?

Thematic relations

Main roles for Noun Phrases

EXERCISE
Other roles for NPs
Roles for other types

Attributives Locatives

nstruments

mnemoni

Further practice

Five min ex 37 / 41

#### Nick Riches

Probs with PA (3)

Main roles for Noun Phrases

Other roles for NPs

Attributives

Further practice

- 1. Jack considers himself a real gigolo
- 2. Angie sent her father the bundle of letters last Tuesday
- 3. The steering wheel came off in his hands
- 4. Jance watched the hovering buzzard
- 5. Who does this pencil case belong to?
- 6. Jake painted the wall with red paint.
- 7. Alina smelt the beautiful flowers.

#### Nick Riches

Motivation for AS

5 min ex

Valence

Thematic relations (roles)

efinition

Determining vale

Oo we need AS?
Projectionist Acc

Probs with PA (1) Probs with PA (2)

Probs with PA (3)

Propositions
What is a proposition

What is a propos

Thematic relations

Main roles for Noun Phrases

EXERCISE

Other roles for NPs Roles for other type

Roles for othe phrases

Locatives

4 mnemonic

Further practice

min ex 39 / 41

- 1. Jack EXP. considers himself TH. a real gigolo ATTR.
- Angie AG. sent her father BEN. the bundle of letters PAT. last Tuesday
- 3. The steering wheel PAT. came off in his hands
- 4. Jance AG. watched the hovering buzzard TH.
- 5. Who POSS. does this pencil TH. case belong to?
- 6. Jake AG. painted the wall PAT. with red paint INS.
- 7. Alina AG. smelt the beautiful flowers TH.

### Nick Riches

Five minute exercise

Probs with PA (3)

Main roles for Noun Phrases Other roles for NPs

Attributives

A mnemonic

Five min ex 39 / 41

Nick Riches

Motivation for AS

5 min ex Valence

Thematic relations (roles

Arg. Structure

Definition

Determining val

o we need AS?

Probs with PA (2) Probs with PA (3)

ropositions

/hat is a proposition?

Thematic relations

Main roles for Noun Phrases

EXERCISE

Other roles for NPs

Roles for other to

Attributives Locatives

.

rther practice

Five min ex 40 / 41

How many possible ways can you think of to complete the following sentence?

(NB think of how many different **syntactic structures** can be used after verb)

1. Doctor Who remembered . . .

### Nick Riches

Motivation for argument structure

Argument Structure

Do we need argument structure?

**Propositions** 

Thematic relations (roles)

Remembering thematic relations

Further practice

Five minute exercise

Bibliography

i min ex /alence

Thematic relations (roles)

Definition
Determining valence

rojectionist Acc robs with PA (1)

Probs with PA (3)
Propositions

hat is a proposition?

Thematic relations
Main roles for Noun Phrases
EXERCISE
Other roles for NPs

ohrases
Attributives
Locatives

ocatives nstruments

A mnemonic

irther practice

ex 40 / 41

#### Nick Riches

Kim, M., & Thompson, C. K. (2000). Patterns of comprehension and production of nouns and verbs in agrammatism: implications for lexical organisation. Brain and Language, 74, 1-25.

Shapiro, L. P., Zurif, E., & Grimshaw, J. (1987). Sentence processing and the mental representation of verbs. Cognition, 27(3), 219-246. https://doi.org/10.1016/S0010-0277(87)80010-0

Probs with PA (3)

Main roles for Noun Phrases

Other roles for NPs

Attributives