

These slides
are taken
from

Forest-Based Translation Rule Extraction



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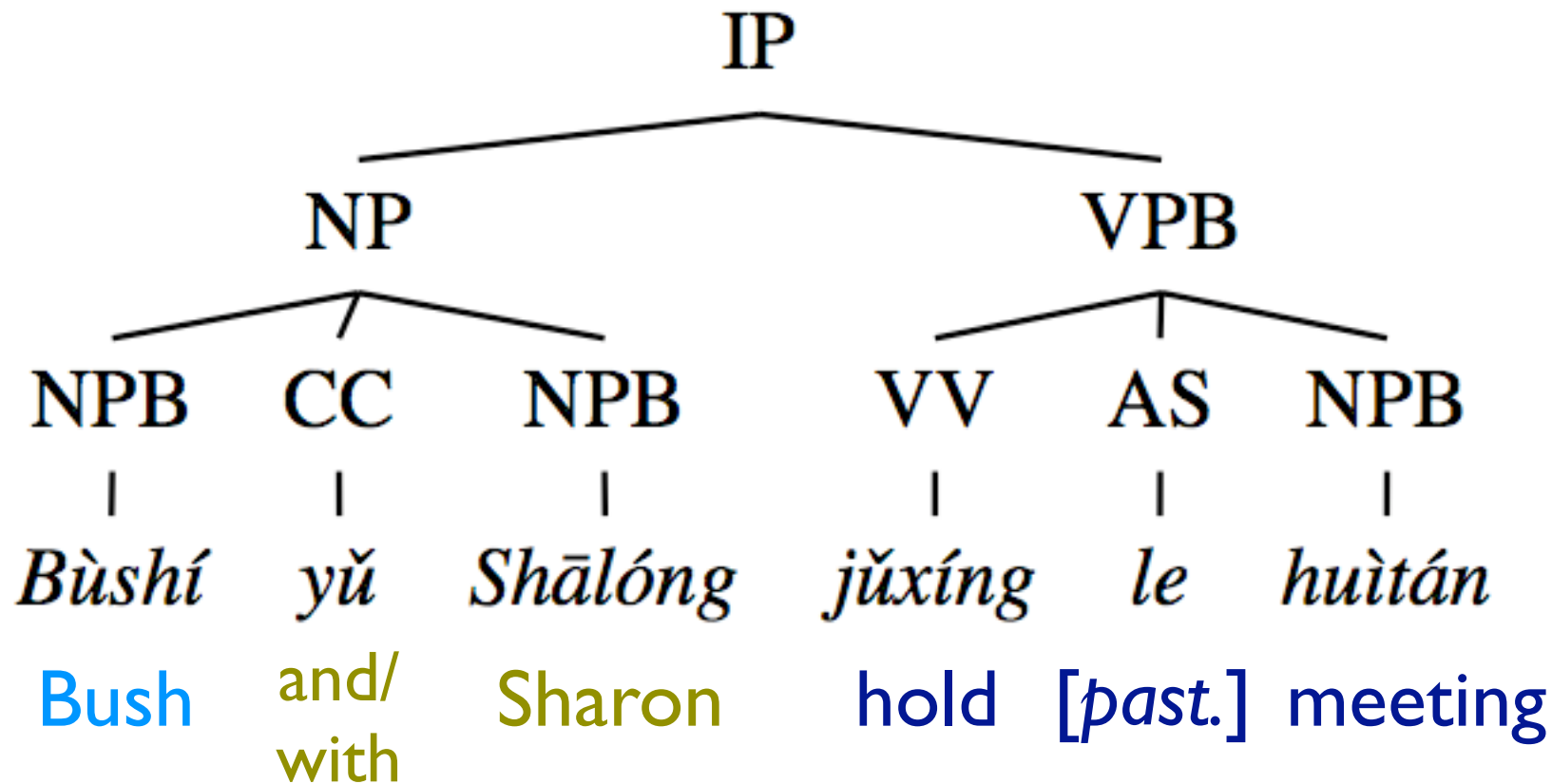
Penn
UNIVERSITY of PENNSYLVANIA

EMNLP 2008 talk, Honolulu, Hawaii, October 2008

This is NOT
the complete
presentation

Tree-based Translation

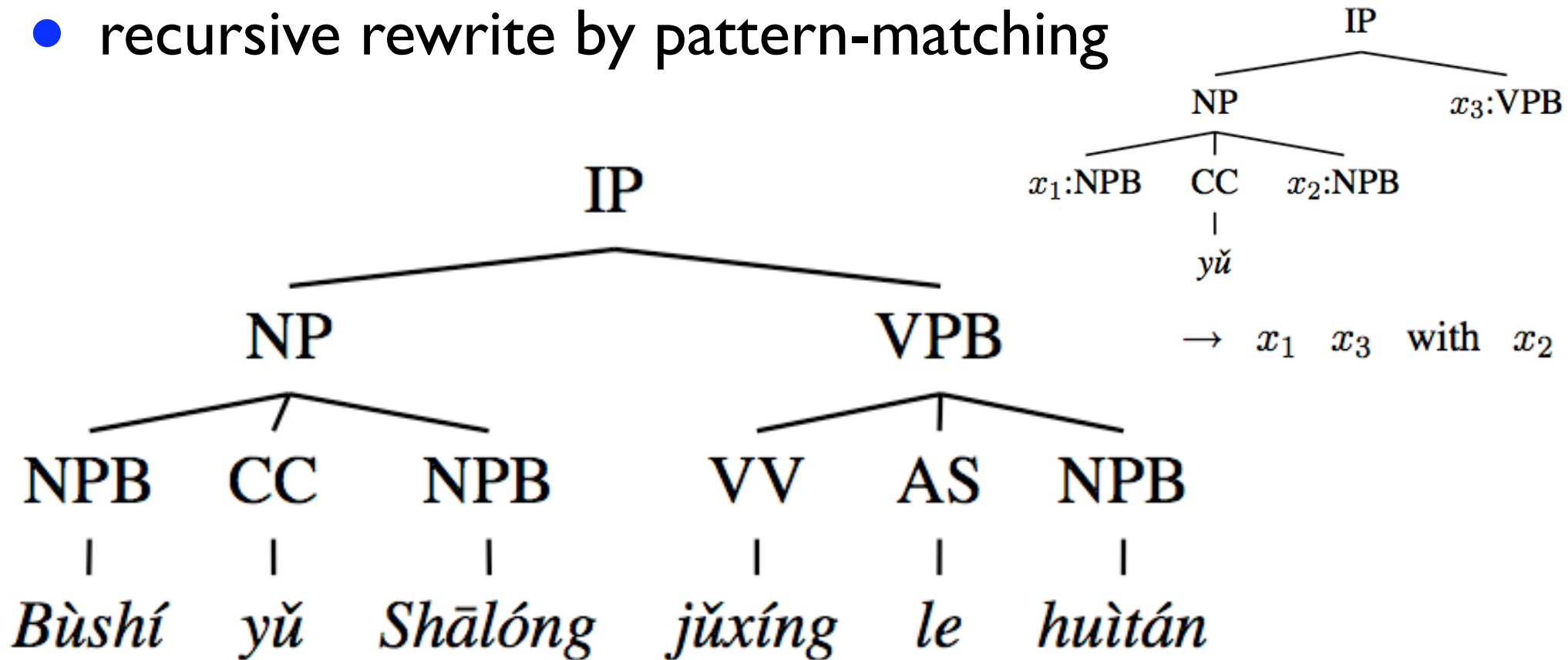
- get 1-best parse tree; then convert to English



“Bush held a meeting with Sharon”

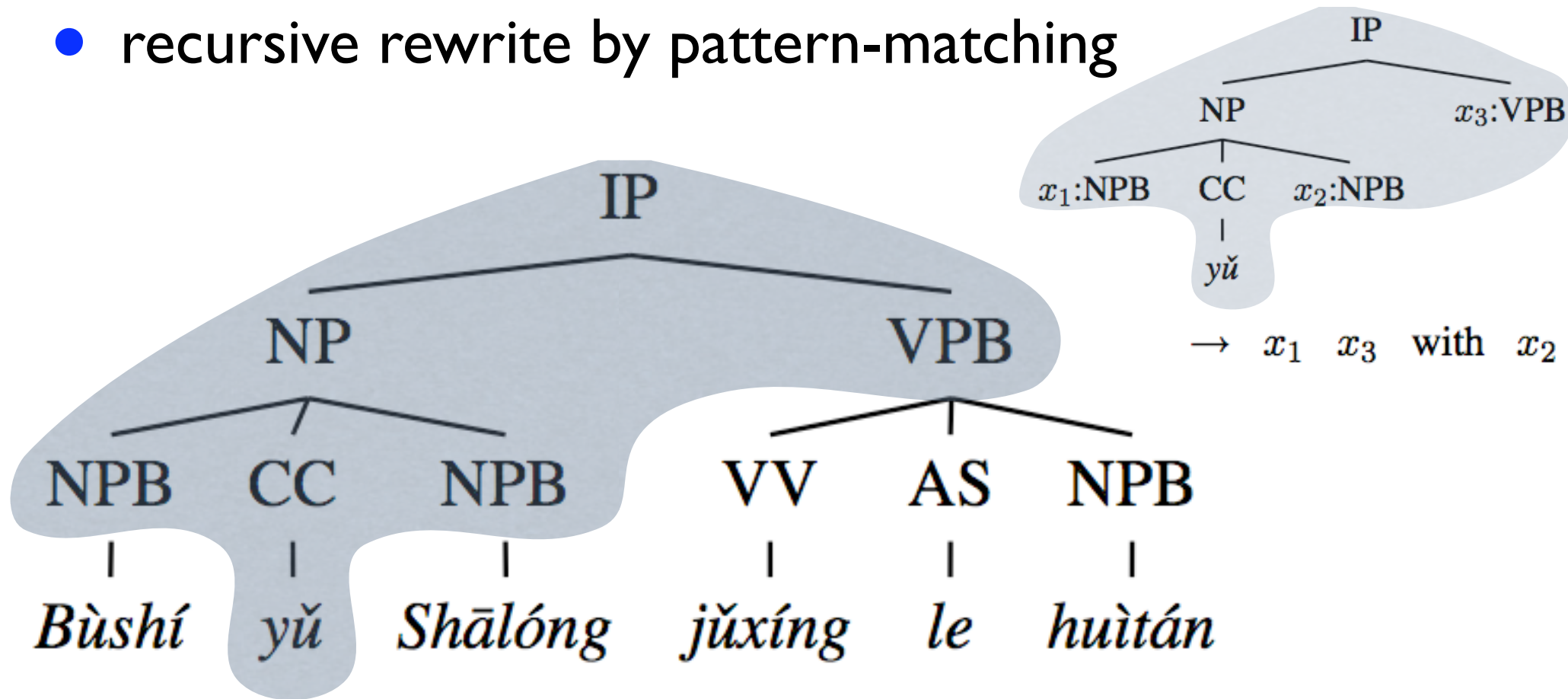
Tree-based Translation

- recursive rewrite by pattern-matching



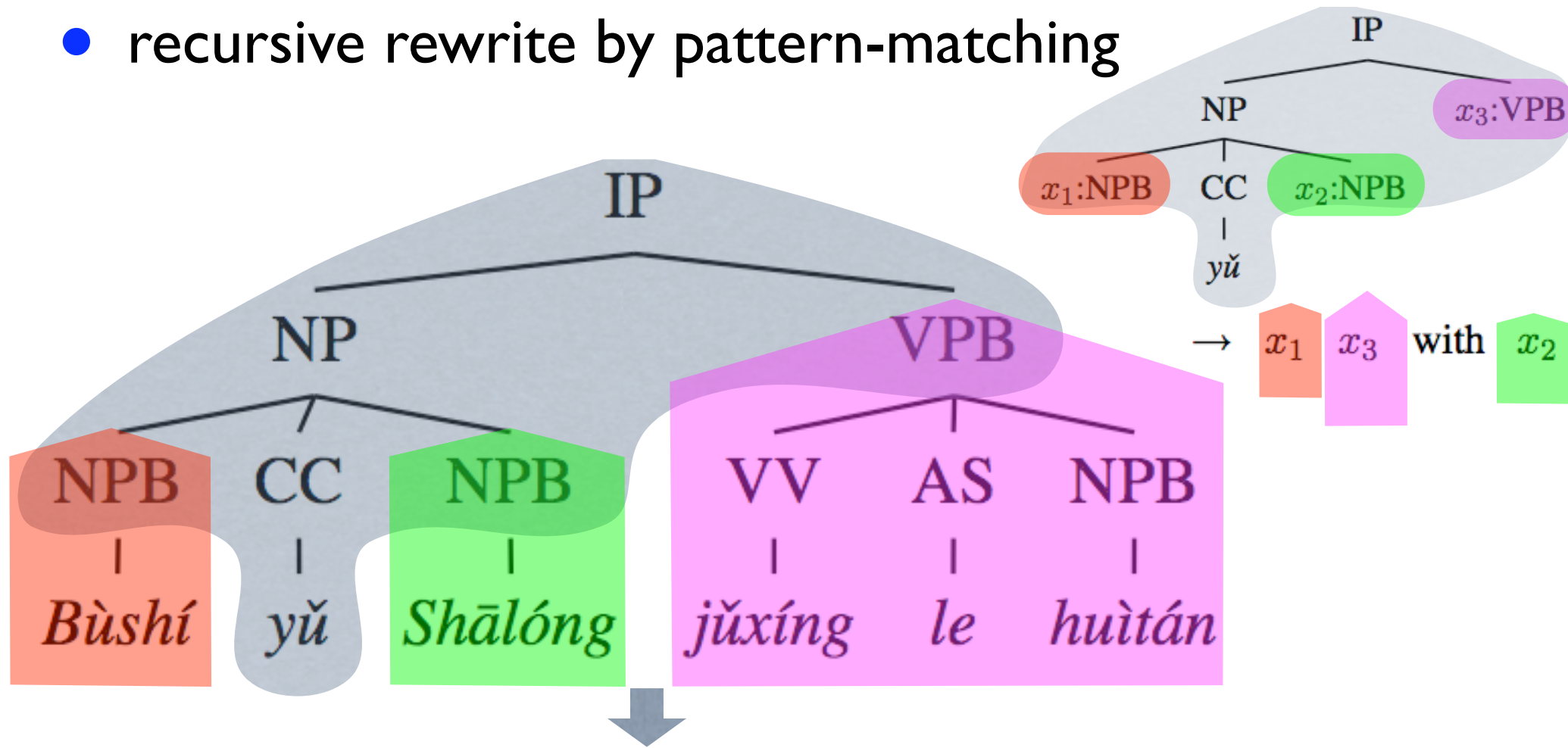
Tree-based Translation

- recursive rewrite by pattern-matching



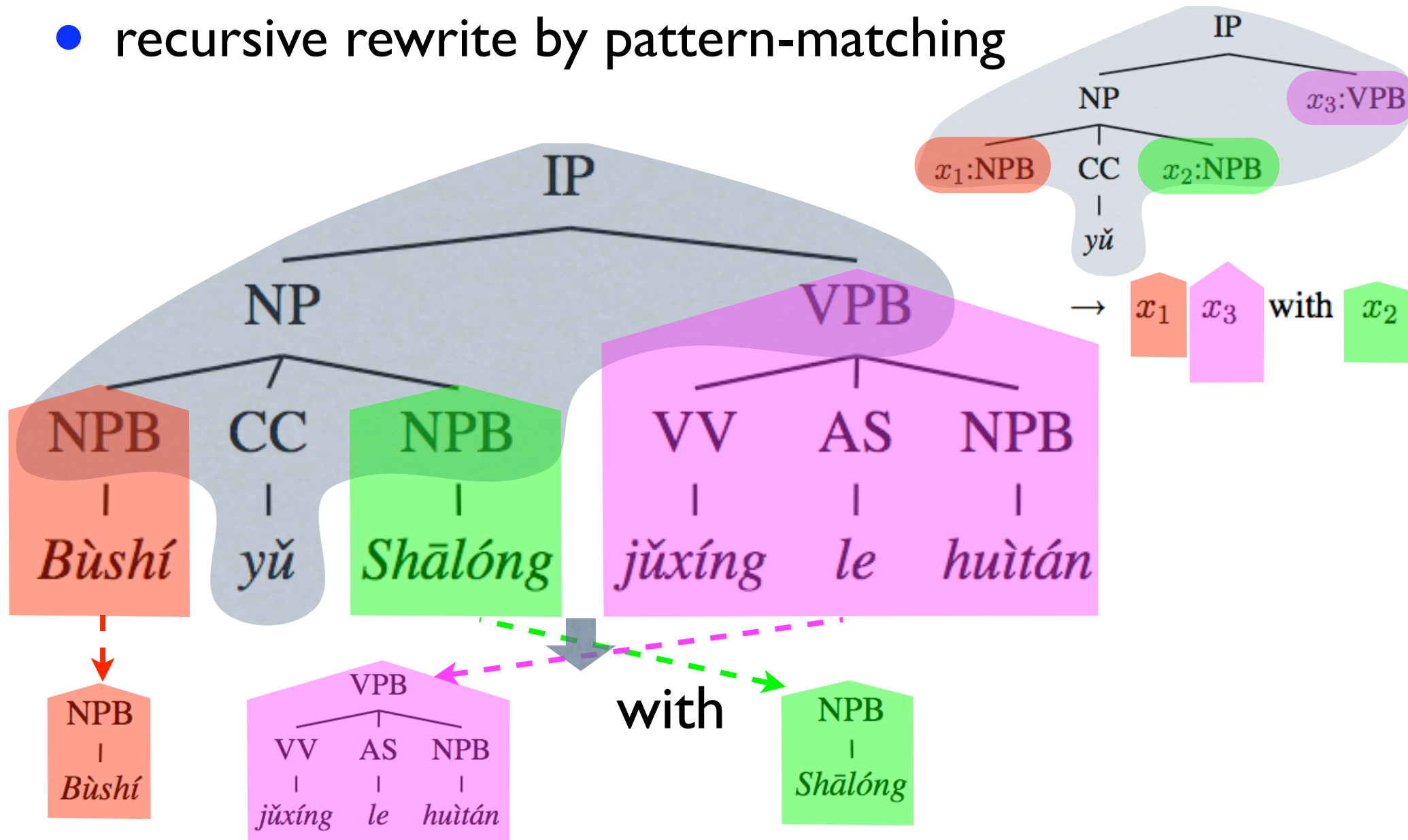
Tree-based Translation

- recursive rewrite by pattern-matching



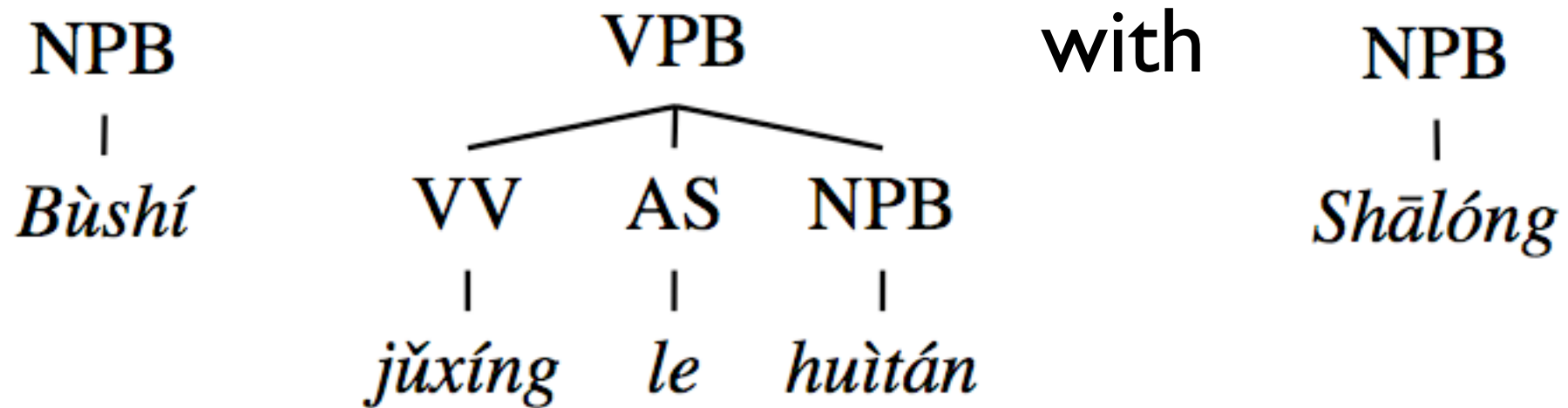
Tree-based Translation

- recursive rewrite by pattern-matching



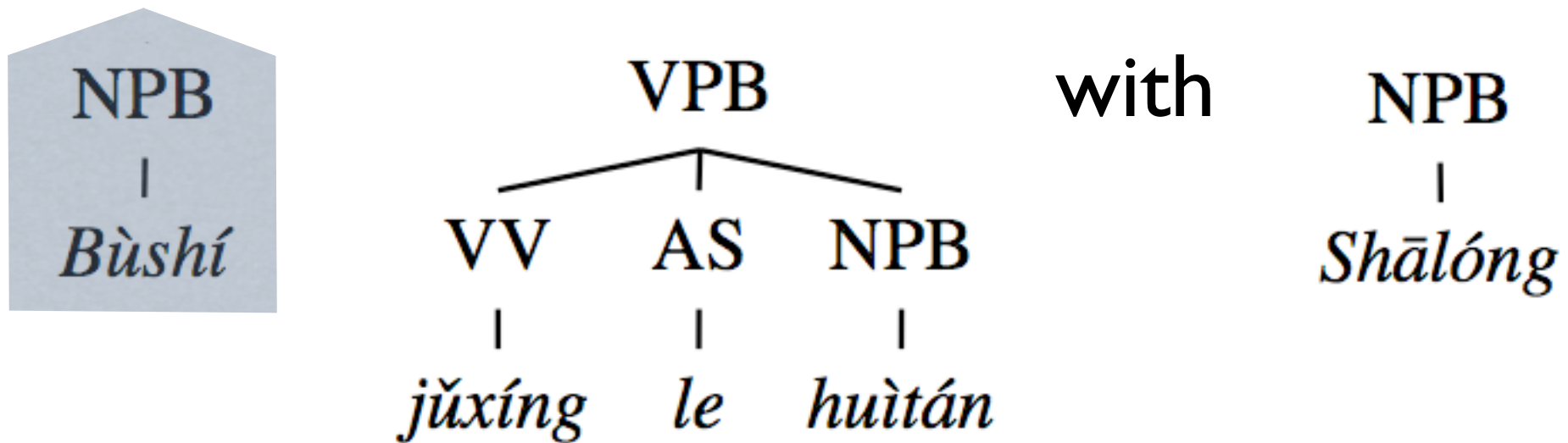
Tree-based Translation

- recursively solve unfinished subproblems



Tree-based Translation

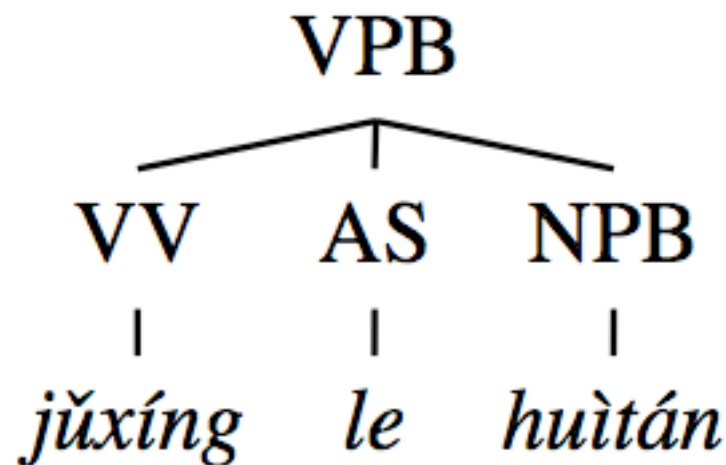
- recursively solve unfinished subproblems



Tree-based Translation

- recursively solve unfinished subproblems

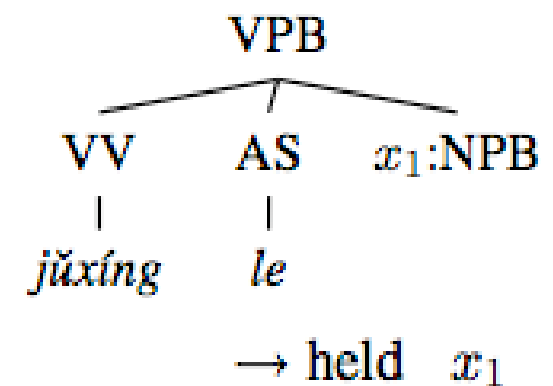
Bush



with

NPB

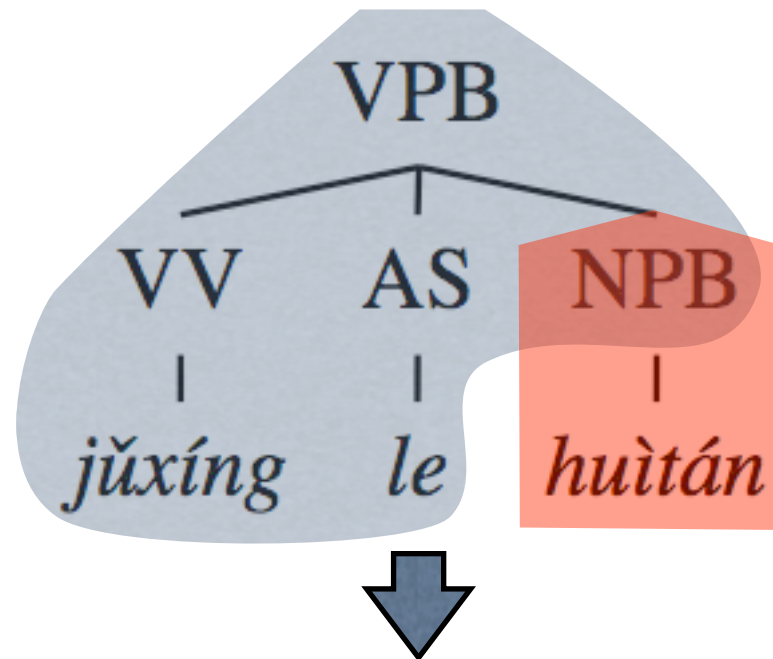
|
Shānlóng



Tree-based Translation

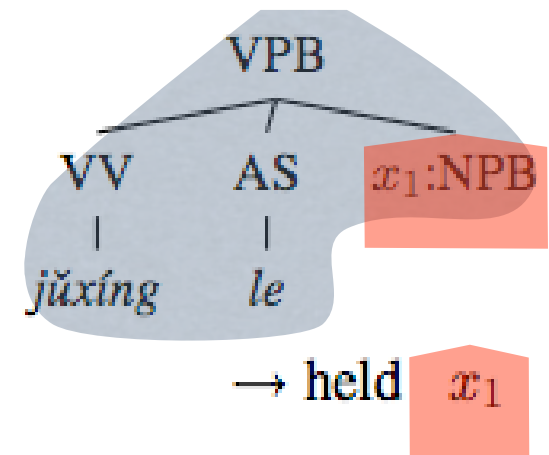
- recursively solve unfinished subproblems

Bush



with

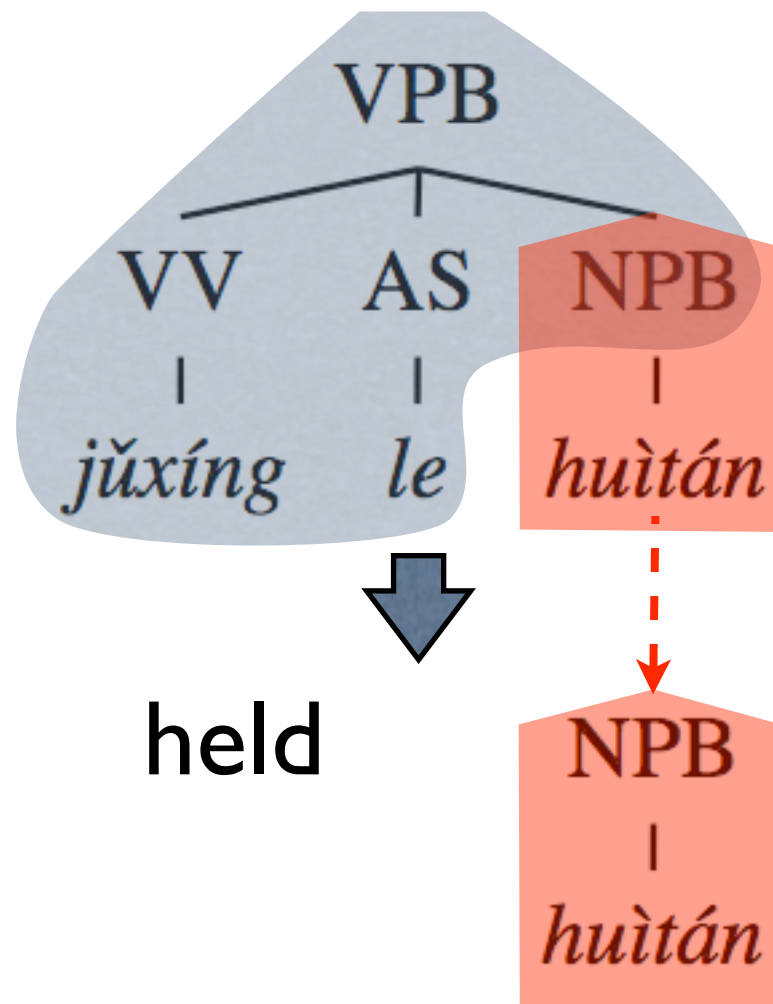
NPB
|
Shānlóng



Tree-based Translation

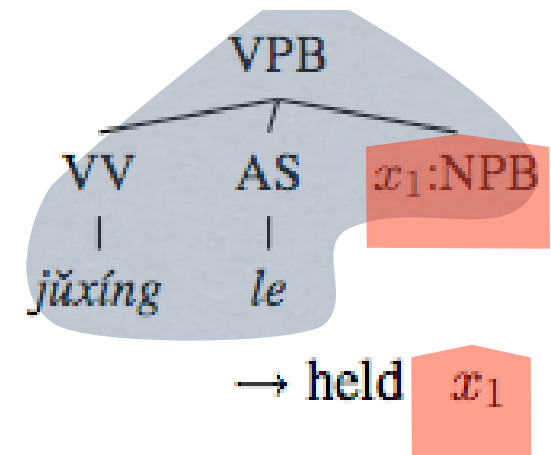
- recursively solve unfinished subproblems

Bush



with

NPB
|
Shānlóng



Tree-based Translation

- continue pattern-matching

Bush

held

NPB

with

NPB

|

huìtán

|

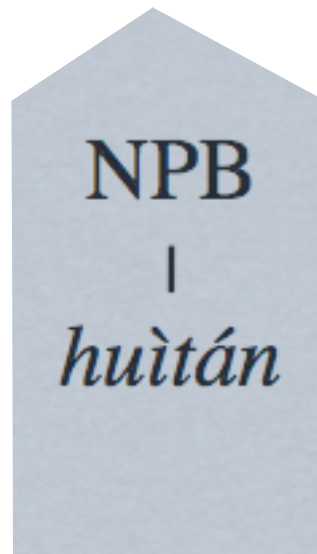
Shālong

Tree-based Translation

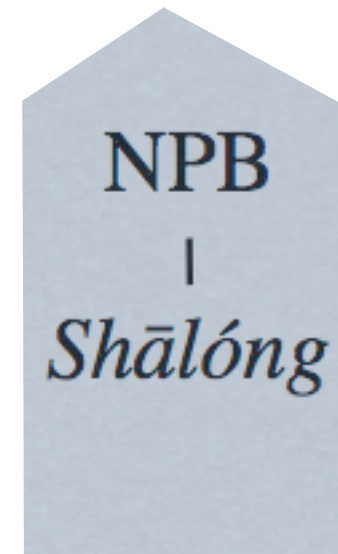
- continue pattern-matching

Bush

held



with



a meeting

Sharon

Tree-based Translation

- continue pattern-matching

Bush held a meeting with Sharon

Tree-based Translation

- continue pattern-matching

Bush held a meeting with Sharon

pros: simplicity: separate parsing and decoding (fast!)

expressive grammar,

“extended domain of locality”

...

