

Multi-categorical multiple right dislocation in Chinese

A cross-framework study

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Right dislocation (RD) is a crosslinguistically common pattern in the colloquial register.

- (1) a. He_i's really smart, John_i (is). (English, Kayne 1994)
- b. Il_i a mangé la soupe, Jean_i.
he has eaten the soup Jean (French, Lambrecht 1981)
- c. Lo_i porto domani, [il dolce]_i.
it bring.1SG tomorrow the dessert
'I'll bring it tomorrow, the dessert.' (Italian, Benincà 1988)



A subtype of RD that has received little attention—that involving multiple RD-ed units (MRD).

- (2) a. He_i gave them_j to his sister, Peter_i, [the keys]_j. (English, Averintseva-Klisch 2009)
- b. *Il_i la_j lui_k a donnée, à Jean_k, [son père]_i, [sa moto]_j.*
he it to.him has given to Jean his dad his motorbike
'He gave it to him, to Jean, his dad, his motorbike.' (French, Calve 1985)

In familiar European languages, MRD is a straightforward extension of SRD (single RD).



An even more special and less discussed pattern: **multi-categorical multiple RD (MMRD)**. It occurs naturally in some Chinese dialects, especially in casual and relaxed speech.

(3) [Ni shangyihuir mai-di ne]_i gao-de na lie, [Dongying Mandarin]
you last.time buy-REL NMLZ put-at where SFP

wo wen, ne nai_i.

I ask the milk

‘Where you put that which you bought last time, I asked, the milk.’

≈ ‘I was asking where you had put the milk you bought last time.’

(in answer to the question ‘What did you ask just now?’)

📍 Dongying Mandarin: a subvariety of Northern Mandarin Chinese



More examples of MMRD:

- (4) a. *Chao caihuar chi ae, wo ji ni, jin shangwu.* [Dongying Mandarin]
stir-fry cauliflower eat SFP I for you this noon
'Stir-fry cauliflower, I for you, this noon.' \approx 'I'll stir-fry cauliflower for you for lunch.'
- b. *Gae-bu-liao liae, shb ye, zhe yi mer.*
do-not-RES SFP anything also this one period
'Can no longer do, anything, this period of time.'
 \approx 'One can't do anything anymore these days (due to COVID-19).'
- c. *Zaezae-zhou ae, dei, mae yunqi lai, haoshi-zhou.*
save-DUR SFP must DISP luck LAI carefully-DUR
'Save up, must, (good) luck, carefully.' \approx 'We must carefully save up our good luck.'



Basic characteristics:

- RD-ed units highly versatile in syntactic category/constituency
- mostly no coreferential term (aka correlate) in main clause
- typically very incomplete main clause

Intuitively, MMRD happens when speakers are not bothering organizing language but just outputting whatever comes to mind first. It is a kind of “disorganized” speech systematically allowed by Chinese syntax—a **minor sentence type** in a broad sense.

Two additional characteristics:

- Free ordering of RD-ed units
- Not limited by illocutionary force (i.e., sentence type in the narrow sense)



- (5) a. *Zaezae-zhou ae, dei, mae yunqi lai, haoshi-zhou.* [Dongying Mandarin]
save-DUR SFP must DISP luck LAI carefully-DUR
'Save up, must, (good) luck, carefully.' (= 4b)
- b. *Zaezae-zhou ae, dei, haoshi-zhou, mae yunqi lai.*
save-DUR SFP must carefully-DUR DISP luck LAI
'Save up, must, carefully, (good) luck.'
- c. *Zaezae-zhou ae, mae yunqi lai, dei, haoshi-zhou.*
save-DUR SFP DISP luck LAI must carefully-DUR
'Save up, (good) luck, must, carefully.'
- d. ... All permutations work—depends on which comes to mind first!



- (6) a. [*Shangyihuir mai-di ne*]_i *gao-de na lie, ni, ne nai?* (interrogative)
last.time buy-REL NMLZ put-at where SFP you the milk
'Where (you_j) put that which (you) bought last time, you_j, the milk?'
≈ 'Where did you put the milk you bought last time?' 🤔
- b. *Chao caihuar chi bae, ngen ji ngae, jin shangwu!* (imperative)
stir-fry cauliflower eat SFP you for me this noon
'Stir-fry cauliflower, you for me, this noon!'
≈ 'Stir-fry cauliflower for me for lunch today, please!' 😊
- c. *Zaezae-zhou ninhae, renga dai, mae yunqi lai, yizuer!* (exclamatory)
save-DUR SFP others will DISP luck LAI altogether
'Save up, she/he will, (good) luck, altogether!'
≈ 'She/he is going to save up all her/his good luck! (surprised and amused tone)' 😂



In this study, I will

- review previous approaches to RD in three frameworks (Minimalism, LFG, Dynamic Syntax)
- conclude that MMRD is a challenge for all of them
- propose a new analysis integrating useful ideas from previous studies



1 Introduction

2 Literature review

- Minimalism
- LFG
- Dynamic Syntax

3 A new analysis

4 Summary



RD usually analyzed in one of two ways:

- ① in a single clause, “RD-ed” unit stranded upon leftward movement of the rest of the clause
← the monoclausal approach
- ② coordination of two clauses plus ellipsis in the second clause, upon leftward movement of the “RD-ed” unit
← the biclausal approach

Both have been applied to Chinese (S)RD—Sun (2022) applies them to inversion-like RD and argument RD, respectively.



Two types of SRD in Chinese:

- (7) a. *Shang feiji le, wo kuai.* [Standard Mandarin]
get.on plane SFP I soon
'Get on the plane, I (will) soon.'
≈ 'I'll get on the plane soon.' (inversion-like SRD)
- b. *Mali mai [e]_i le ba, baozhi_i.*
Mary buy PRO SFP SFP newspaper
'Probably Mary bought (it), the newspaper.' (argument SRD) (Sun 2022)

Argument SRD is like the common European RD pattern, except for the null pronoun.



Sun's (2022) analysis:

(8) a. **Inversion-like SRD: focus fronting**

$[_{\text{FOCP}} [_{\text{VP}} t_i \text{ shang feiji le }]_j [_{\text{FOC}'} \text{ Foc } [_{\text{IP}} \text{ wo}_i [_{\text{I}'} \text{ I } [_{\text{AspP}} \text{ kuai } [_{\text{Asp}'} \text{ Asp } t_j]]]]]]$
'Get on the plane, I (will) soon.'

b. **Argument SRD: coordination-plus-ellipsis** (à la Ott & de Vries 2016)

$[_{\text{P}} [_{\text{CP}_1} \text{ mali mai pro}_i \text{ le ba }] [_{\text{,}'} [_{\text{CP}_2} \text{ baozhi}_i [_{\text{TP}_2} \text{ ~~mali mai t}_i \text{ le}~~]]]]$
'Probably Mary bought (it), the newspaper.'

A special “colon coordinator” in (8b): Koster's (2000) specifying coordination

(8a) more flexible: does not require the RD-ed (i.e., stranded) string to be a constituent



Limitation: one-round-per-clause (hence inapplicable to MRD)



Ott & de Vries's (2016) schema:

(9) $[_{CP_1} \dots \text{correlate}_i \dots] (:) [_{CP_2} dXP_i [\dots t_i \dots]]$

Two types of (S)RD:

- Colon coordination (in syntax): backgrounding (BRD)  topic-like
- Direct juxtaposition (in discourse): afterthought (ARD)  focus-like

(10) *Ich habe heute [einen Star]_i getroffen: [den John Travolta]_i!* [German]
I have today a.ACC star met the.ACC John Travolta
'I met a star today: John Travolta!' (ARD) (Ott & de Vries 2016)

(The “:” here is a punctuation mark, not the colon coordinator.)



Ott & de Vries's (2016) derivations:

- (11) a. $[_{IP} [_{CP_1} \text{he}_i\text{'s really smart}] [_{I'} : [_{CP_2} \text{John}_i [t_i \text{ is really smart}]]]]$ (BRD)
- b. $[_{CP_1} \text{ich habe heute einen Star getroffen}]$ (ARD)
 $[_{CP_2} [\text{den John Travolta}].\text{ACC}_i [\text{habe ich } t_i \text{ getroffen}]]$

In general, the coordination-plus-ellipsis approach cannot handle inversion-like RD in Chinese, because Ott & de Vries's *dXP* is by definition a **phrasal constituent**.



As for MRD: usually mentioned in passing (and only the European pattern)

e.g., Sun (2022): multiple CP conjuncts

[CP₁ : [CP₂ : CP₃]]

CP₁ c-commands all other CPs, serving as the “antecedent” triggering repetition-based ellipsis. But this analysis is only meant for BRD (12a), not for inversion-like RD (12b).

- (12) a. ‘Maria brought it_i to him_j, the dessert_i, to Gianni_j.’ (A'-movement in CP₂/CP₃ + ellipsis)
b. ‘Save up, must, DISP luck LAI, carefully.’ (‘must’: head; ‘DISP luck LAI’: nonconstituent)

NB each CP in (12a) still involves discourse-driven A'-movement, which can only target **constituents** of certain **phrasal** categories!



So none of the existing minimalist analyses is applicable to MMRD.

But can we combine focus fronting and multi-coordination as a solution?

- i.e., focus fronting in CP_1 & ellipsis in $CP_{i \geq 2}$

In principle, yes, but resource-demanding:

- ellipsis only at PF, syntax/LF still dealing with full-fledged CPs

Besides, still restricted to the familiar European pattern:

- ellipsis in $CP_{i \geq 2}$ still relies on A'-movement of RD-ed units
- so only possible for certain phrasal constituents (i.e., Ott & de Vries's *dXP*)

A better solution: coordinating just enough structure & ellipsis without A'-movement

(Such resource-awareness is seen in previous studies, though not in minimalist ones...)



Kalbertodt (2019):

- Empirical focus on German, so only about the **coreferential** pattern in European languages
- Not directly useful for MMRD, but shows us how RD can be handled by LFG

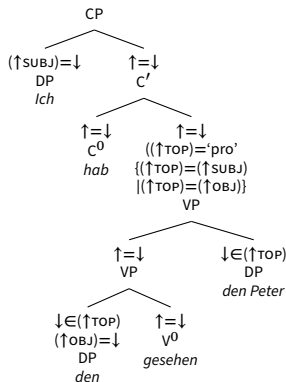
Also distinguishes BRD and ARD—e.g., same string, different intonation

- (13) a. *Ich hab ihn_i gesehen, [den Peter]_i.* (BRD, deaccented) [German]
 I have him seen the Peter
- b. *Ich hab ihn_i gesehen. [Den Peter]_i.* (ARD, nuclear accent)
 I have him seen the Peter (Kalbertodt 2019)

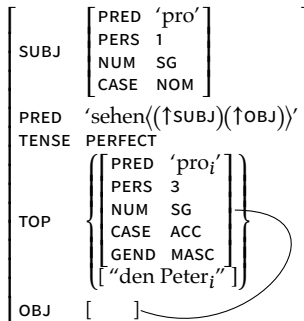


(14) *Ich hab ihn_i gesehen, den Peter_i.* 'I have seen him, Peter.' (BRD)

a. c-structure



b. f-structure



Kalbertodt's analysis:

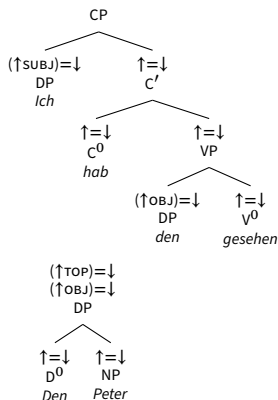
- c-structure: VP-adjunct
- part of main clause
- f-structure: topic function
- correlate *den* also topic

Basically a monoclausal analysis

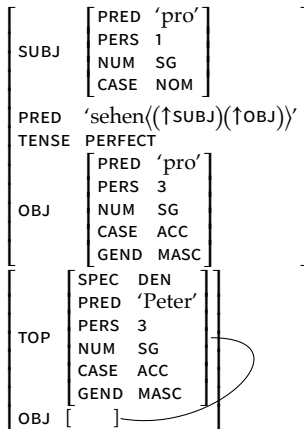


(15) *Ich hab ihn_i gesehen. Den Peter_i.* ‘I have seen him. Peter.’ (ARD)

a. c-structure



b. f-structure



Kalbertodt's analysis:

- separate c-structure (DP)
- called an “orphan”
- not part of main clause
- f-structure: object & topic

A biclausal analysis, but not using full CPs—though this “lite” syntax may only be apparent... (unshown elided structure)



Useful ideas:

- adjunction for structure-building
- “lite” biclausal syntax

Limitation: designed for familiar European languages

- coreferentiality-based
- only phrasal constituents as RD-ed units



Different from Minimalism/LFG, Dynamic Syntax (DS) directly reflects **time-linear parsing**. Thus, it has built-in **resource-awareness**, which is well reflected in its treatment of RD.

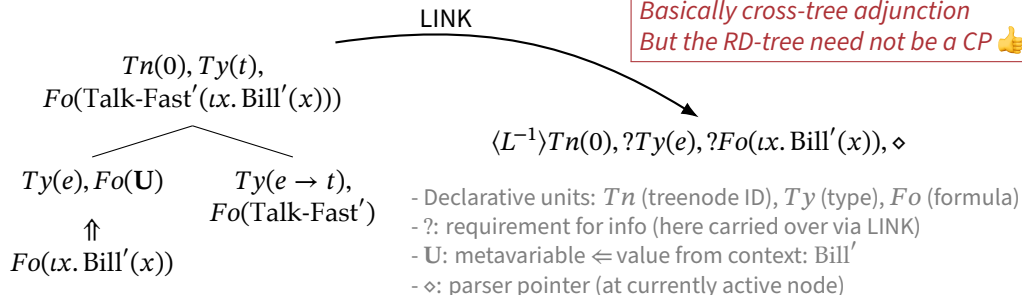
DS analysis of RD (Cann et al. 2005, Wu 2005, Chatzikyriakidis 2016):

- BRD: two linked trees
- ARD: via an implicit question

Still only designed for familiar European patterns and inapplicable to MMRD.



(16) He_i talks too fast, [the new secretary]_i. (Cann et al. 2005; see also Wu 2005)



Left tree: main clause (address 0, type t)

Right tree: RD-ed unit (address 'reversely linked to $Tn(0)$ ', requiring $\text{Bill}'_{(e)}$)

The $?$ -requirements can only be met by a term that refers to Bill.



Chatzikyriakidis (2016): clarification answers to implicit questions

- (17) *Ton_i htipise o Giorgos,, [ton Giani]_i.* [Greek]
him.ACC hit the George the.ACC John.ACC
'George hit him,, John.' (ARD)

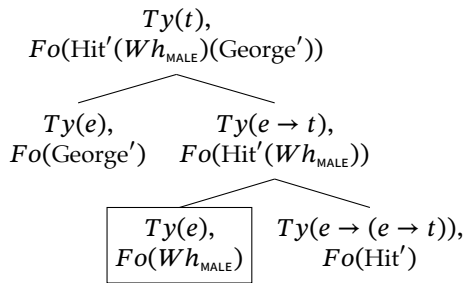
(Chatzikyriakidis uses “,,” to indicate a “period intonation” associated with afterthoughts.)

Interpretive effect: 'George hit him. You want to ask who George hit? George hit John.'

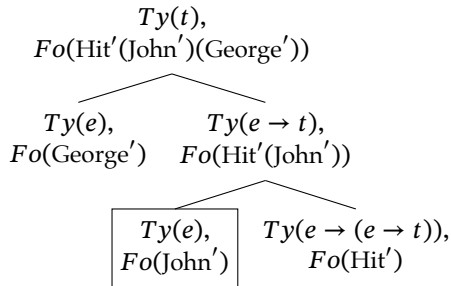
(i) Parse main clause. (ii) Parse afterthought. (iii) Make implicit question. (iv) Substitution.



- (18) a. Implicit question
 'Who_{MALE} did George hit?'



- b. Substitution 'George hit John.'



(adapted from Chatzikyriakidis 2016)

- ✓ Clearly brings out the clarification function of ARD
- ✓ Truly lite (RD-ed units need not be elided from CPs)
- ✓ Can be extended to MRD (with multiple implicit Qs)



Multiple ARD in Chatzikyriakidis's (2016) analysis:

- (19) *Ton_i ida,, [ton Giorgio]_i,, xtes.* [Greek]
him.ACC saw.1SG the.ACC George.ACC yesterday
'I saw him,, George,, yesterday.' (two metavariables: 'who', 'when')

Interpretive effect: 'I saw him. You want to ask who I saw? I saw George. You also want to ask when I saw George? I saw George yesterday.'

Limitations:

- Only works for **constituent** RD (since each DS tree must have a well-defined type)
- Relies on a relatively **complete main clause** (left-to-right parsing feeds on lexical content)

Thus, the DS analysis (despite its truly lite design) cannot be applied to Chinese MMRD either.



Having reviewed how RD is analyzed in three theoretical frameworks, I conclude that MMRD is a challenge for all of them.

Table: Three previous approaches to RD

Approach	Framework	Advantage	Problem
Focus fronting	Minimalism	can derive inversion-like, nonconstituent RD	limited to SRD
Coord.+ellipsis	Minimalism	can derive MRD	limited to constituent RD, resource-demanding
Lite multi-tree syn.	DS (LFG)	can derive MRD, resource-sensitive	limited to constituent RD, needs complete main clause



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Proposal:

- Inheriting basic minimalist settings so that focus fronting can normally proceed
- Using **multi-workspace** derivation to implement lite multi-tree syntax in Minimalism

The reason why the original coordination-plus-ellipsis approach is resource-demanding is because it manipulates full-fledged CPs. There is no such requirement in multi-workspace derivation. The content of a side workspace may well be a vP, DP, etc.

Multi-workspace derivation has long been used in practice (e.g., Zwart 2011, Fowlie 2013).

(20) [The man] kicked the ball.

(Zwart 2011; pre-derived subject)

A new analysis: deriving MMRD



An MMRD sentence:

- (21) *Zaezae-zhou ae, dei, mae yunqi lai, haoshi-zhou.* [Dongying Mandarin]
save-DUR SFP must DISP luck LAI carefully-DUR (= 4b)
'Save up, must, (good) luck, carefully.' \approx 'We must carefully save up our good luck.'

We can derive this sentence using **three workspaces** with just enough structure.

- (22) a. WS_1 (main + RD_1): $[_{ForceP} [_{FocP} [_{VP} \text{zaezae-zhou } pro_o]_k [_{Foc'} Foc t_j]_i]_i [_{Force} ae] [_{GroundP} [_{IP} pro_s [_{I'} [_{I} dei] t_k]_j [_{Ground'} Ground t_i]]]]$ (à la Sun 2022)
- b. WS_2 (RD_2): $[_{VP} pro_s [_{V'} [_{V} mae] [_{ApplP} yunqi_o [_{Appl'} [_{Appl} lai] [_{VP} \text{zaezae-zhou } t_o]]]]]]$
- c. WS_3 (RD_3): $[_{VP} [_{AdvP} haoshi-zhou] [_{VP} pro_s [_{V'} v [_{VP} \text{zaezae-zhou } pro_o]]]]$

(Here I put RD_1 in WS_1 to demonstrate focus fronting, but it may also have its own WS.)



Next, we coordinate the three workspaces, but

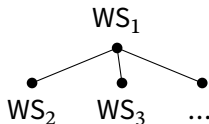
- not by discourse juxtaposition since not all our workspaces contain sentences
- nor by a CoP (or :P) in phrasal syntax since it encodes more asymmetry than desirable
 - we do not want [$WS_1 : [WS_2 : [WS_3 : \dots]]]$ (pace Sun 2022)
 - because in MMRD only the main clause is fixed in position, while the RD-ed units can be freely reordered (i.e., no evidence of structural asymmetry)
 - so we want something like [$WS_1 > \{ WS_2, WS_3, \dots \}]$ instead
(where “>” means ‘structurally above / more prominent than’)



$$[WS_1 > \{WS_2, WS_3, \dots\}]$$

Set Merge cannot yield this structure (binary-branching!) but **Pair Merge** can (cf. Song 2024).

- Let WS_1 pair-merge with $WS_{i \geq 2}$ separately, each on a different plane.
(see Chomsky 2004 et seq. and especially Chomsky 2019)
- Get $\{\langle WS_1, WS_2 \rangle, \langle WS_1, WS_3 \rangle, \langle WS_1, \dots \rangle\}$. **1**
- Order-theoretically, this is equivalent to $\langle WS_1, \{WS_2, WS_3, \dots\} \rangle$. **2**
- Both **1** and **2** describe the same partial order, as in the following Hasse diagram:





Corresponding to this “loose coordination” in syntax, we can let the workspaces’ contents be only **loosely conjoined** in semantics too:

- not by the boolean \wedge since not all workspaces have type- t values in our lite setting
- a generic coproduct (aka disjointed union) operation \oplus is more suitable

$$\llbracket WS_1 \rrbracket \oplus \llbracket WS_2 \rrbracket \oplus \llbracket WS_3 \rrbracket \oplus \llbracket \dots \rrbracket$$

(23) *Zaezae-zhou ae, dei, mae yunqi lai, haoshi-zhou.* [Dongying Mandarin]
save-DUR SFP must DISP luck LAI carefully-DUR (= 4b)

‘Save up, must, (good) luck, carefully.’ \approx ‘We must carefully save up our good luck.’

Interpretive effect (more pedantically):

‘ $_{WS_1}$ Save up (sth.), we must]; $_{WS_2}$ saving luck]; $_{WS_3}$ carefully saving (sth.).’



We can take a step further and give the cross-workspace information integration a formal protocol—using a process calculus such as the **session calculus** (Yoshida & Gheri 2020).

In session-based modeling of concurrency and distributed systems, a communication **session** involves **participants** p, q, \dots and their **processes** P, Q, \dots .

(24) $p \triangleleft P = !c\langle m \rangle. ?d(x). 0$

(The process P of participant p : send a message m via channel c , receive any message via channel d and assign it to variable x , and terminate.)

(See paper version for more detail.)



We can view the cross-workspace information integration in an MMRD sentence as a session:

- Each workspace is a participant.
- Each Pair Merge step establishes a communication channel.
- The integrated information is ultimately fed to the C-I system (also viewed as a participant).

Our running example: $[\text{WS}_1 \text{ Save up, must}], [\text{WS}_2 \text{ (good) luck}], [\text{WS}_3 \text{ carefully}].'$

- (25)
- $\text{WS}_2 \triangleleft P_{\text{WS}_2} = !a\langle \llbracket \text{WS}_2 \rrbracket \rangle.0$ (WS_2 sends its content as a message via channel a and terminates.)
 - $\text{WS}_3 \triangleleft P_{\text{WS}_3} = !b\langle \llbracket \text{WS}_3 \rrbracket \rangle.0$ (WS_3 sends its content as a message via channel b and terminates.)
 - $\text{WS}_1 \triangleleft P_{\text{WS}_1} = ?a(x).?b(y).!s\langle \llbracket \text{WS}_1 \rrbracket \oplus x \oplus y \rangle.0$
(WS_1 receives two messages via channels a and b and assigns them to x and y , loosely conjoins the received messages with its own content, sends the coproduct via channel s , and terminates.)
 - $\text{CI} \triangleleft P_{\text{CI}} = ?s(z).0$ (CI receives a message via channel s , assigns it to z , and terminates.)



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My analysis of Chinese MMRD is as follows:

- (26) *Zaezae-zhou ae, dei, mae yunqi lai, haoshi-zhou.* [Dongying Mandarin]
save-DUR SFP must DISP luck LAI carefully-DUR (= 4b)
‘_{WS₁} Save up, must], [_{WS₂} (good) luck], [_{WS₃} carefully].’

Syntax: Derived in three workspaces with just enough structure, loosely joined by Pair Merge

PF: Main clause fixed in position, RD-ed units flexible in ordering

LF: Three parallel (i.e., concurrent) thoughts, loosely joined by coproduct \oplus

Session: A protocolization of cross-workspace information integration





Thank you!





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-  Cann, R., R. Kempson & L. Marten
The dynamics of language: An introduction, Elsevier, 2005
-  Chatzikyriakidis, S.
Afterthoughts in Greek
Journal of Linguistics 53, 279–325, 2016
-  Kalbertodt, J.
Right dislocation and afterthought in German
Universität zu Köln dissertation, 2019
-  Ott, D. & M. de Vries
Right-dislocation as deletion
Natural Language & Linguistic Theory 34, 641–690, 2016



Song, C.

On Hilbert's epsilon operator in FormSequence

Biolinguistics 18, Article e14061, 2024



Sun, Y.

The syntax of right dislocation in Mandarin Chinese and Italian

Università degli Studi di Padova dissertation, 2022



Wu, Y.

The Dynamic Syntax of left and right dislocation

University of Edinburgh dissertation, 2005



Yoshida, N. & L. Gheri

A very gentle introduction to multiparty session types

Distributed computing and internet technology, 73–93, Springer, 2020