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The Syntax of Two Types of Sluicing in Tamil[1]

1. Introduction

Syntacticians are intrigued by the mismatch between form and meaning. Elliptical constructions are one such instantiation in the sense that the elided constituent receives a predictable semantic content not evident from the surface form. Such a form-meaning mismatch gives rise to various proposals that detail the mechanism by which the elided constituent restores its intended meaning. This paper aims to make another contribution to sluicing (Ross 1969; Lobeck 1995, 1999; Chung, Ladusaw and McCloskey 1995; Chung 2013; Merchant 1999, 2004; Van Craenenbroeck 2010b) as a major type of ellipsis, using Spoken Tamil as the object language.[2] In English, the typical examples of sluicing are demonstrated by the bare wh-sluice *who* in (1)a and *what* in (1)b, respectively:

(1) a. John met someone, but I don't know who.
b. Mary bought something, but I don't know what.

The central issue surrounding sluicing concerns the way by which the wh-sluice restores its intended meaning. Recent theories about sluicing are split into two major directions. The first major proposal (starting from Ross (1969) and elaborated in detail by Lobeck 1995, Merchant 2001, inter alia) argues that the wh-sluice is derived from A'-movement of the wh-word to Spec-CP, followed by TP-deletion at the level of PF. Call this the *PF-deletion approach*.[3] The second major approach (Pollmann 1975; Erteschik-Shir 1977; Chao 1987; Zagona 1988; Hardt 1993, 1999; Chung, Ladusaw, and McCloskey 1995; Lobeck 1995; Lobeck 1999; Fortin 2007; Van Craenenbroeck 2010a,b) refutes the PF-deletion approach and the claim that A'-movement of the wh-sluice happens in syntax. Instead, it argues that the underlying sluiced clause contains a null pronoun. In such approach, the wh-sluice receives its semantic interpretation by an ad-hoc semantic rule defined at LF. Call this the *pro-approach* to sluicing (Wei 2004; Van Craenenbroeck 2010a, 2010b). To schematize the two approaches to sluicing:

(2) a. ..., but I don't know [$_{CP}$ who$_i$ [$_{TP}$ ~~John met t$_i$~~]] (PF-deletion approach)
b. ..., but I don't know [$_{CP}$ who$_i$ [$_{TP}$ *pro*$_i$]] (*Pro*-approach)

[1] Acknowledgement (pending)

[2] All Spoken Tamil examples are drawn from native speakers of the Batticaloa Tamil variety (Eastern Sri Lanka), and they are checked by Indian Tamil speakers. Our grammatical analysis and moreover conclusion, however, should apply across Tamil dialects. For consistency reasons, we adjust some transcriptions and glosses for the cited data (e.g. Lehmann 1993a; Annamalai 2003).

[3] For the applications of the PF-deletion approach to other elliptical constructions (e.g. VP-ellipsis, gapping, etc), see Ross 1969, Hankamer and Sag 1976, 1980, Sag and Hankamer 1984, Lasnik 1999a,b, 2001, Tomioka 1999, 2001, Merchant 2001, among others.

Empirically, the two approaches can give rise to different predictions, whereas in other cases, they make the same prediction by different reasons. To name one example, both predict that the wh-sluice can be insensitive to island conditions. Under the PF-deletion approach, islands are considered to be interface conditions defined at PF,[4] and consequently, islands will become ineffective since deletion appears at PF. By contrast, the *pro*-approach states that the wh-sluice is not contained within configurations which violate island constraints.

It is plausible that the two approaches to sluicing are effective in a single language. What is at issue is the use of correct diagnostics so that we can properly describe which approach is compatible with which observation. In this paper, we discuss how Tamil sluicing sheds light on the applicability of the two approaches, and whether Tamil sluicing can be derived from a distinctive underlying structure. Even though this may be the first serious work on Tamil sluicing, a lot of syntactic descriptions of Tamil grammar (Arden 1942; Lehmann 1993; Schiffman 1999; Annamalai 2003) have been published, which can be used to provide the proper diagnostic for the derivational mechanism of sluicing. We shall claim that Tamil demonstrates two types of sluicing, which differ in many morphosyntactic behaviors. We call them *case-marked* (CM) and *non-case-marked* (NCM) *sluicing*, as they differ in the presence/absence of the grammatical case on the wh-sluice. In CM sluicing, the sluiced clause is derived from a full-fledged interrogative CP in which the wh-sluice undergoes leftward scrambling to the CP-edge followed by TP-domain deletion at PF. While we shall demonstrate that most A/A'-diagnostics are uninformative of the type of operation Tamil wh-scrambling involves (contra Sarma (2003)), Tamil wh-scrambling and CM sluicing are still instances of A'-movement. The second type of sluicing, namely NCM sluicing, stems from a distinct configuration in which the sluiced clause involves a biclausal structure formed by a normal sentence and a null copular question. We claim that the NCM wh-sluice is derived from *Spad* (*Sluicing Plus A Demonstrative*), as the null copular question can be accompanied by a demonstrative, cf. English 'John met someone, who is that?' and Dutch spading (Van Craenenbroeck 2010b). Spad is not derived from a full-fledged interrogative CP, and therefore its wh-sluice does not involve any scrambling operation.

The present analysis of Tamil sluicing refutes the claim that reduced clefts are one underlying sluicing source in Dravidian languages, and moreover invites an inquiry of whether Dravidian as a language family in the historical sense always receives a homogeneous analysis, given the immense parametric variation among branch languages. In the same vein, we contend that any claim about the 'principles' of Dravidian syntax must be supported by strong cross-linguistic evidence at the mircroscopic level. The paper is organized as follows: In section 2, we discuss the free word-order phenomenon in Tamil. Section 3 discusses the properties of right dislocation (RD) in Tamil. Section 4 talks about Tamil cleft sentences. Section 5

[4] The spirit that islands are de facto interface conditions originated in Chomsky and Miller 1963, Ross 1967, Chomsky and Lasnik 1977. See also Uriagereka 1999, Richards 2001, Fox and Pesetsky 2005, and Boeckx 2008 for illustrations of islands as interface conditions, from the minimalist perspective.

illustrates three types of wh-questions in Tamil. Section 6 demonstrates two types of sluicing in Tamil. Section 7 discusses the type of movement operation in Tamil wh-questions. Section 8 concludes the paper with further comments and suggestions about Dravidian syntax.

2. Free word order in Tamil simple sentences

Tamil is a Southern Dravidian language with an unmarked SOV order (Arden 1942; Steever 1983; Lehmann 1993; Schiffman 1999).[5] Grammatical case is overtly marked on nominal expressions. Comparing with other non-configurational languages, free word order of Tamil is understood in the sense that its word order permutation does not have any grammatical significance but is conditioned by other discourse-related considerations (Annamalai 2003), hence a discourse configurational language (K. É. Kiss 1995). Example (3)a is the unmarked SOV word order of a basic sentence, whereas (3)b indicates that leftward object scrambling is acceptable. It is widely assumed that (3)a and (3)b differ in terms of the information structure. (3)a with Arjuna as the topic can serve as an answer to 'What did Arjuna do?' (3)b with the object Kumar as the topic can answer the question 'What happened to the Kumar?':

(3) a. ardʒuna kumaar-ai aDi-TT-aan.[6] [7]

[5] I follow without delving into the details of Sarma (2003) that Tamil has an underlying SOV order. It should be noted that there are proposals suggesting that Indo-Aryan languages derive SVO as the underlying order, whereas SOV is derived by obligatory overt wh-movement (e.g. Bangla; Simpson and Bhattacharya 2003). Their analysis stems from the Bangla's observation that embedded CP can be optionally preverbal or postverbal, and moreover the position of the embedded CP has an impact on possible scope reading. However Tamil does not seem to have the same degree of optionality of the CP position as Bangla. Moreover the wh-word in Tamil is strictly clause-bound. For opposing views to Simpson and Bhattacharya (2003), see Bhatt and Dayal (2007).

[6] 1,2,3: person; ACC: accusative; ADJ: adjectival; CLM: cleft marker (Telugu); COMP: complementizer; CONT: continuous; DAT: dative; DEM: demonstrative; DISJ: disjunction marker (Telugu); EMP: emphatic; F: feminine; FOC: focus marker; FUT: future; GEN: genitive; INDEF: indefinite; INF: infinitive; INSTR: instrumental; LOC: locative; M: masculine; N: neuter; NEG: negative; NOM: nominalizer; Q: question; PL: plural; PST: past; PRES: present; S: singular; TAG: tag question; Nominative case which is morphologically null is not marked on the gloss. We adopt a single transcription system for all Tamil examples in this paper. Some Tamil transcriptions drawn from other literature may be adjusted for the purpose of exposition.

[7] It is famously known that Tamil allows the use of differential object marking in which indefinite non-rational objects can be caseless. As a result, (i) in which an indefinite reading of pizza (i.e. some pizza) is grammatical:

(i) ardʒuna piza saapi-TT-aan.
Arjuna pizza eat-PST-3SM
'Arjuna ate (some) pizza.'

However, rational objects can never drop grammatical case (also (3)):

(ii) kumaar oru paiyan*(-ai-p) paar-tt-aan.
Kumar a boy-ACC see-PST-3SM
'Kumar saw a boy.'

Arjuna Kumar-ACC beat-PST-3SM
'Arjuna beat Kumar.' (lit. As for Arjuna, (he) beat Kumar.)

b. kumaar-ai ardʒuna aDi-TT-aan.
Kumar-ACC Arjuna beat-PST-3SM
'Arjuna beat Kumar.' (lit. As for Kumar, Arjuna beat (him))

The freedom of scrambling is not limited to direct objects. Starting from the base sentence (4)a, any constituent can be left-scrambled to the sentence-initial position without any effect on its grammaticality (but with various information structures expressed):

(4) a. Kumaar neettu akila-kku puttahat-ai koDu-tt-aan.
Kumar yesterday Akeela-DAT book-ACC give-PST-3SM
'Kumar gave Akeela the book.'

b. puttahat-ai akila-kku neettu kumaar koDu-tt-aan.
book-ACC Akeela-dat yesterday Kumar give-PST-3SM

c. akila-kku kumaar neettu puttahat-ai koDu-tt-aan.
Akeela-DAT Kumar yesterday book-ACC give-PST-3SM

d. neettu kumaar akila-kku puttahat-ai koDu-tt-aan.
yesterday Kumar Akeela-DAT book-ACC give-PST-3SM

Scrambling can also apply to clausal complements, e.g. (5):

(5) a. ardʒuna [kumaar se-tt-aan endru] sol-kir-aan.
Arjuna Kumar die-PST-3SM that say-PRES-3SM
'Arjuna says that Kumar died.'

b. [kumaar se-tt-aan endru] ardʒuna sol-kir-aan.
Kumar-NOM die-PST-3SM that Arjuna say-PRES-3SM

Tamil NP-scrambling is subject to island conditions (Corver and van Riemsdijk 1994; Müller and Sternefeld 1994). This can be verified by the contrast in (6). (6)a shows that NP-scrambling can cross clausal boundaries, while (6)b,c are ungrammatical since it crosses an island constraint:

(6) a. piza-v-ai$_i$ naan [kumaar t_i saapi-TT-aan endru] ninai-kir-een.
pizza-ACC 1s Kumar eat-PST-3SM that think-PRES-1s
'The pizza$_i$, I think [that Kumar ate t_i].'

b. *kumaar-ai$_i$ ardʒuna [baabu t_i kon-dr-aan] endra vatanti-y-ai
Kumar-ACC Arjuna Babu kill-PST-3SM that rumor-ACC
ke-TT-aan.

Please refer to Lehmann (1993: 28-30) for the discussion about the differential object marking. Thanks to one reviewer for pointing this out.

hear-PST-3SM
*'Kumar, Arjuna heard the rumor [that Babu killed t_i].'

c. *ardʒuna-vai$_i$ kooTTam [kumaar t_i aDi-TT-aan pirahu] muDi-nt-atu.
Arjuna-ACC party Kumar beat-PST-3SM after finish-PST-3SN
*'Arjuna$_i$, the party finished [after Kumar beat t_i].'

3. Right dislocation in Tamil

By contrast, the occurrence of postverbal constituents, or namely rightward dislocation (RD) over verbs in Tamil, is relatively rare according to the literature. However, it remains to be verified if the written/spoken variety and speaker's intuition converge on this issue. Herring and Paolillo (1995) argue that spoken and written Tamil differ significantly regarding the occurrence of postverbal constituents. They show that in spoken Tamil, the grammatical subject is more likely to occur sentence-finally, which is not the case in written Tamil. While their corpus study points out that RD only applies to grammatical subjects (but not direct or oblique objects), speaker's intuition shows that other constituents can be RD-ed over the verb. RD is argued to bring along the effect of an afterthought and should be uttered with a special intonation pattern (Herring 1994; Andronov 2003; Annamalai 2003), e.g. (7), and it should be distinguished from other cases of leftward scrambling:[8]

(7) ardʒuna saapi-TT-aan, piza-vai.
Arjuna eat-PST-3SM pizza-ACC
'Arjuna ate, a pizza.' (lit. Arjuna ate (something), namely a pizza))

RD (e.g. (7)) differs from (leftward) scrambling (e.g. (3)b) in terms of the intonation pattern. Leftward scrambling is uttered with a single intonation pattern. By contrast, the RD-ed constituent is always separated from the rest of the clause by a pause. Moreover, the RD-ed constituent can provide supplementary information about its antecedent (e.g. in the form of a resumptive pronoun) in the main clause, which is contrary to scrambling which always leaves a gap at the base position.[9] For instance, *inglish puttaham* 'English book' resumes *oru puttaham* 'a book' in (8)a and *avane* refers to the RD-ed constituent Kumar in (8)b (Annamalai (2003: 9), with transcription and gloss adjusted):

(8) a. kumaar oru puttaham paDicci-kkiTT-urun-d-aan, inglish puttaham.

[8] We shall argue that some instances of dislocation involving a scrambling operation in which the based NP is displaced to the overt position by movement (especially for leftward dislocation). On the other hand, we shall also claim that postverbal RD involves a cleft structure which is not necessarily created by movement/scrambling. This shares the spirit with Herring (1994), though there are Dravidian works which analyze all cases of dislocation as scrambling (Jayaseelan and Amritavalli 2005).Thanks to one reviewer for pointing this out.

[9] Thanks to a reviewer for pointing this out.

Kumar a book read-CONT-be-PST-3SM English book
'Kumar was a reading a book, an English book.'

b. naan avane veeTTu-kku kuup-T-een, kumaar-e.
1s he-ACC house-DAT call-PST-1S Kumar-ACC
'I called him home, Kumar'

4. Cleft sentences

In Tamil and other Dravidian languages, there exists one type of non-canonical word order (e.g. SVO) which deserves some attention. Starting from Arden (1942) and discussed in detail by Lehmann (1993), it has been pointed out that Tamil has an SVO strategy formed by nominalized verbs (also called participial nouns according to Lehmann (1993: 78, 295). The nominalized verb consists of a tensed verbal stem and a nominalizing suffix –*atu*, yet lacks phi-features in agreement with the grammatical subject. Annamalai (2003: 24) points out that the use of a nominalizing suffix is frequently used in cleft (i.e. predicational) sentences.[10] Example (9)a is the basic sentence, whereas (9)b to (9)e demonstrate various cleft sentences in which different constituents undergo RD:

(9) a. neettu naan kumaar-ukku paNom koDu-tt-een.
yesterday 1s Kumar-DAT money give-PST-1s
'Yesterday I gave money to Kumar.'

b. neettu kumaar-ukku paNom koDu-tt-atu naan.
yesterday Kumar-DAT money give-PST-NOM 1s
'It was me who gave money to Kumar.'

c. neettu naan kumaar-ukku koDu-tt-atu paNom.
yesterday 1s Kumar-DAT give-PST-NOM money
'It was money that I gave to Kumar.'

d. neettu naan paNom koDu-tt-atu kumaar-ukku.
yesterday 1s money give-PST-NOM Kumar-DAT
'It was to Kumar that I gave money yesterday.'

e. naan kumaar-ukku paNom koDu-tt-atu neettu.
1s Kumar-DAT money give-PST-NOM yesterday
'It was yesterday that I gave money to Kumar.'

f. kumar va-nth-atu taxi-il.
Kumar arrive-PST-NOM taxi-INSTR
'It is by taxi that Kumar arrived.'

[10] We follow other Dravidian linguists in terming this structure as clefts. Notice that Tamil clefts differ from other typical clefts in that the former do not allow an impersonal pronoun (i), which contrasts with English *it*-clefts (ii)

(i) *neettu kumaar-ukku paNom koDu-tt-atu atu naan.
yesterday Kumar-DAT money give-PST-NOM DEM 1s

(ii) It/This/That is me who gave money to Kumar.

Case marking is required on the clefted constituent (e.g. the dative case in (9)d), similar to simple sentences. This includes structural case such as the accusative:

(10) neettu kumar aDi-TT-atu enn-ai/*naan.
Yesterday Kumar hit-PST-NOM I-ACC/I
'It was me who Kumar hit yesterday.'

Cleft sentences differ from postverbal RD in simple sentences (e.g.(7)) in the information structure. The clefted constituent always receives a contrastive focus (in the sense of Kiss (1998)) which is absent in RD. For instance, (9)b implies that it was I (instead of other people in the discourse) who gave money to Kumar, whereas (9)c implies that money (but not books) was what I gave to Kumar. The observation that the clefted constituent receives a contrastive focus is further verified in the following examples. In Tamil, the focused constituent can be suffixed by –*taan*, e.g.:

(11) a. neettu kumaar-ukku paNom koDu-tt-atu naan-taan.
yesterday Kumar-DAT money give-PST-NOM 1s-FOC
'It was me who gave money to Kumar.'
b. neettu naan kumaar-ukku koDu-tt-atu paNom-taan.
yesterday 1s Kumar-DAT give-PST-NOM money-FOC
'It was money that I gave to Kumar.'
c. neettu naan paNom koDu-tt-atu kumaar-ukku-taan.
yesterday 1s money give-PST-NOM Kumar-DAT-FOC
'It was to Kumar that I gave money yesterday.'
d. naan kumaar-ukku paNom koDu-tt-atu neettu-taan.
1s Kumar-DAT money give-PST-NOM yesterday-FOC
'It was yesterday that I gave money to Kumar.'
e. kumar va-nth-atu taxi-il-taan.
Kumar arrive-PST-NOM taxi-INSTR-FOC
'It is by taxi that Kumar arrived.'

Note that –*taan* can also be added to the focused constituent at its base position in simple sentences. Examples in (12) were listed by Lehmann (1993: 158, his (364)):

(12) a. kumaar-taan neettu va-nt-aan.
Kumar-FOC yesterday come-PST-3SM
'It was Kumar who came yesterday.'
b. kumaar neettu-taan va-nt-aan.
Kumar yesterday-FOC come-PST-3SM
'It was yesterday that Kumar came.'

However, the focused constituent cannot be RD-ed:

(13) a. *neettu va-nt-aan kumaar-taan.
yesterday come-PST-3SM Kumar-FOC
b. *kumaar va-nt-aan neettu-taan.
Kumar come-PST-3SM yesterday-FOC
'It was yesterday that Kumar came.'

To summarize so far:

(14) a. Tamil has two types of VX structures.
b. If the verb is fully inflected, the right-dislocated constituent brings along the effect of an afterthought.
c. If the verb is nominalized, the clefted constituent expresses a contrastive focus.

In the following sections we shall claim that cleft sentences provide an important clue to the derivational mechanism of sluicing in Tamil.

5. Three types of wh-questions in Tamil

In this section, we illustrate three major types of wh-questions in Tamil, namely simple wh-questions (5.1), cleft questions (5.2) and Spad (Sluicing Plus A Demonstrative) (5.3), which paves the way for the analysis of sluicing in Tamil.

5.1. Simple wh-questions

Tamil wh-expressions are placed in-situ. At the outset, wh-scrambling behaves similarly with NP-scrambling (section 2). For instance, (15)a and (16)a are the unmarked wh-in-situ questions, whereas their scrambled counterparts are equally grammatical ((15)b and (16)b):[11]

[11] The free word ordering of wh-expressions is unobserved in other Dravidian languages, e.g. Malayalam (Madhavan 1987; Jayaseelan 1996, 2008). Jayaseelan (2004) notices that the position of wh-words in Tamil is more flexible than Malaylam, and moreover listed (i-ii) (cited from Savio (1991: 26) and claim that (ii) is the result of subject moving to an inner focus position:

(i) evan kaTai-kku poo-n-aan?
who shop-DAT go-PST-3SM
'Who went to the shop?'

(ii) kaTai-kku evan poo-n-aan?
shop-DAT who go-PST-3SM

However, my consultant informs that the interpretation of the wh-word remains identical in (i-ii), both of which including the prior knowledge of 'someone' in the wh-question. It shows that the interpretation of the wh-word is not determined by its position, but its identity. We therefore do not consider the position of the wh-word in (ii) as involving any inner focus movement. Instead the semantics of the wh-word (at the 'canonical' and the preverbal position) can be the result of the identity of the wh-operation which can be interpreted in-situ. See footnote 26 for similar discussion.

(15) a. anand et-ai eLuth-in-aan?
Anand what-ACC write-PST-3SM
b. et-ai anand eLuth-in-aan?
what-ACC Anand write-PST-3SM
'What did Anand write?'

(16) a. Nee enta puttahat-ai vaang-in-aai?
You which book-ACC buy-PST-2s
b. enta puttahat-ai nee vaang-in-aai?
which book-ACC you buy-PST-2s
'Which book did you buy?'

Wh-scrambling is subject to movement constraints, similar to NP-scrambling. (17)a indicates that movement of wh-expressions can span across clausal boundaries, whereas in (17)b, wh-expressions cannot cross island constraints (also in Sarma (2003: 243)):

(17) a. et-ai$_i$, unak-u [kumaar t_i saapi-TT-aan endru] teriyum?
what-ACC you-DAT Kumar eat-PST-3SM that know
'What did you know [that Kumar ate t_i]?'
b. *yaar-a$_i$ koottam [kumaar t_i aDi-TT-aan pirahu] muDi-nt-atu?
who-ACC party Kumar beat-PST-3SM after finish-PST-3SN
'Who$_i$ did the party finish [after Kumar beat t_i]?'
c. *yaar-ai$_i$ kumaar [ardʒuna t_i kon-dr-aan] endra vatanti-yai ke-tt-aan?
who-ACC Kumar Arjuna kill-PST-3SM that rumor-ACC hear-PST-3SM
'Who$_i$ did Kumar hear the rumor [that Arjuna killed t_i]?'

Moreover multiple scrambling of NPs and wh-words is available. In (18)a, all wh-words stay in-situ, whereas wh-scrambling exists in (18)b:

(18) a. yaar et-ai vaang-in-aan?
who what-ACC buy-PST-3SM
'Who bought what?'
b. et-ai yaar vaang-in-aan?
what-ACC who buy-PST-3SM

Examples in (19) formed by three wh-words demonstrate the same wh-scrambling capacity:

(19) a. yaar enge et-ai vaang-in-aan?
who where what-ACC buy-PST-3SM
'Who bought what where?'

b. et-ai yaar enge vaang-in-aan?
what-ACC who where buy-PST-3SM
c. enge et-ai yaar vaang-in-aan?
where what-ACC who buy-PST-3SM

However, simple wh-questions differ from simple sentence regarding the possibility of RD. Annamalai (2003: 6) points out that RD-ed wh-questions are banned regardless of type (with transcriptions slightly adjusted):

(20) a. *va-ndaa yaaru?
come-PST who
Intended: 'Who came?'
b. *kumaar poo-r-aan enge?
Kumar go-PRES-3SM where
Intended: 'Where is Kumar going?'
c. *kumaar poo-r-aan kaDe-kk-aa?
Kumar go-PRES-3SM shop-to-Q
Intended: 'Is Kumar going to the shop?'
d. *kumaar poo-r-aan kaDai-kk-ile?
Kumar go-PRES-3SM shop-DAT-TAG
Intended: 'Kumar is going to the shop, isn't he?'
e. *Kumar poo-r-an enta kaDai-kku?
Kumar go-PRES-3SM which shop-DAT
Intended: 'Which shop is Kumar going to?'

5.2. Cleft questions

Another type of wh-questions is analogous to cleft sentences (section 4). Call this cleft questions for short. Examples in (21) show that clefted wh-expressions are grammatical (Lehmann 1993; Schiffman 1999; Rajendran 2001):

(21) a. kumaar poo-n-atu enge?
Kumar go-PST-NOM where
'Where did Kumar go? (lit. Where is that Kumar went?)'
b. kumaar poo-n-atu kaDai-kk-aa?
Kumar go-PST-NOM shop-DAT-Q
'Was it to the shop that Kumar went?'
c. kumaar poo-n-atu kaDai-kk-ile?
Kumar go-PST-NOM shop-DAT-TAG
'Was it not to the shop that Kumar went?'
d. poo-n-atu yaaru?
go-PST-NOM who
'Who went?' (lit. Who is it that (he) went?)

e. kumaar poo-n-atu enta kadai?
Kumar go-PST-NOM which shop
'Which shop did Kumar go?' (lit. Which shop is that Kumar went to?)

f. kumaar poo-n-atu eppadi?
Kumar go-PST-NOM how?
'How did Kumar go?' (lit. How is it that Kumar went?)

g. kumaar poo-n-atu yen?
Kumar go-PST-NOM why
'Why did Kumar go?' (lit. Why is it that Kumar went?)

Clefted wh-expressions are always nominative which is morphologically null (cf. (9)-(10)). While structural case on the wh-expressions is mandatory in simple wh-questions, this is not the case for cleft questions. Observe the following contrast in (22). The unmarked *enna* 'what' must be used in cleft questions, whereas the accusative case-marked *etai* is required in simple SOV wh-questions:

(22) a. kumaar vaang-in-atu enna/*et-ai?
Kumar buy-PST-NOM what/what-ACC
'What is that Kumar bought?'

b. kumaar *enna/et-ai vaang-in-aan?
Kumar what/what-ACC buy-PST-3SM
'What did Kumar buy?'

5.3. Spad (Sluicing Plus a Demonstrative)

In addition to (21) and (22), there exists another wh-construction which has not been discussed by Tamil grammarians. It involves a biclausal configuration in which the wh-sluice is coupled by a demonstrative in the consequent clause, following a complete antecedent clause (23).[12] If the antecedent of the wh-sluice is discourse-salient, a personal pronoun (e.g. *avan* 'he') can be used:

(23) kumaar yaar-ai-yo santi-tt-aan, atu/avan yaar?
Kumar s.o-ACC meet-PST-3SM DEM/3SM who
'Kumar met someone, who is that/he?'

Notice that the wh-sluice in the consequent clause cannot be case-marked:

[12] The demonstrative is optional in Spad:
(i) kumaar yaar-ai-yo santi-tt-aan, yaar?
Kumar s.o-ACC meet-PST-3SM who
'Kumar met someone, who (is that)?'
It is also plausible to suggest that a null copular structure is involved in Spad. Thanks to one reviewer for pointing this out.

(24) kumaar et-ai-yo vaang-in-aan, atu enna/*et-ai?
Kumar something-ACC-INDEF buy-PST-3SM, DEM what/what-ACC
'Kumar bought something, what is that?'

This wh-strategy can be used with all types of wh-expressions, including wh-adjuncts and *which*-phrases:

(25) a. kumaar po-n-aan, atu enge?
Kumar go-PST-3SM DEM where
'Kumar went, where is that?'
b. kumaar po-n-aan, atu eppadi?
Kumar go-PST-3SM DEM how
'Kumar went, how is that?'
c. kumaar po-n-aan, atu yen?
Kumar go-PST-3SM DEM why
'Kumar went, why is that?'
d. kumaar oru kaDai-kku poo-n-aan, atu enta kadai?
Kumar one shop-DAT go-PST-3SM DEM which shop
'Kumar went to a shop, which shop is that?'

This wh-strategy is reminiscent of what Van Craenenbroeck (2010b) called it as *Spading* (Sluicing Plus A Demonstrative in Noninsular Germanic). In Dutch dialects, the wh-sluice can be coupled by a demonstrative:

(26) a. A: Jef ei gisteren iemand gezien. B: Wou da? [Wambeek Dutch]
Jeff has yesterday someone seen who that
'A: Jeff saw someone yesterday. B: Who?'
b. Jef eid iemand gezien, mo ik weet nie wou da.
Jeff has someone seen but I know not who that
'Jeff saw someone, but I don't know who.' (Van Craenenbroeck 2010b: 13)

Adopting Van Craenenbroeck's terminology, we call this wh-strategy in Tamil *Spad* (Sluicing Plus a Demonstrative) for short. Spad and Spading share some similarities and differ in other areas. For instance, neither Spad and Spading are found in simple wh-questions:

(27) a. *anand [atu enna] eLuth-in-aan? [Tamil]
Anand DEM what write-PST-3SM
b. *Nee [atu enta puttaka] vaang-in-aai?
You DEM which book buy-PST-2s

(28) *Uu dad ei Jef tprobleem opgelost?
How DEM as Jeff the.problem solved

'How did Jeff solve the problem?' [Wambeek Dutch; Craenenbroeck 2010b: 16)]

Second, the wh-sluice in Spad and Spading can only be nominative. Observe the following conversation in Dutch dialects (cf. Tamil (24)):

(29) A: Ich han inne gezieë.
I have someone seen
'I saw someone.'
B: Wea/*Wem dat?
Who-nom / who-acc that
'Who?' [Waubach Dutch] (Van Craenenbroeck 2010b: 13)

Nevertheless, Spad differs from Spading in a number of aspects. For instance, *which*-phrases can be used in Spad, but not in Spading:

(30) atu enta kadai? [Tamil]
DEM which shop
'Which shop is that?'

(31) *Welken boek da?
which book that [Wambeek Dutch] (Van Craenenbroeck 2010b: 17)

Moreover, Van Craenenbroeck claims that Spading (32)a stems from an underlying cleft (32)b:

(32) a. A: Ik em iemand gezien. B: Wou da?
I have someone seen who DEM
'A: I saw someone. B: Who?'
b. Wou is da da ge gezien etj?
who is DEM that you seen have
'Who is it that you saw?'

Tamil Spad differs from cleft questions (section 5.2) in various aspects. First, while the verb stem is nominalized in cleft questions, it is fully inflected in Spad. Second, as Spad involves a biclausal configuration, native speakers can always insert a pause between the antecedent clause and the consequent wh-question, whereas cleft questions are always uttered with a single intonation pattern. The structural distinction between Spad and cleft questions is further shown by adverb placement. Adverbs (e.g. *nichayamaha* 'surely) always precede the verb in cleft questions (33), yet they follow the verb in Spad (34):

(33) kumaar <nichayamaha> po-n-atu <*nichayamaha> enge? [cleft question]
Kumar surely go-PST-NOM surely where

‘Where is that Kumar went for sure?’

(34) Kumar <*nichayamaha> po-n-aan, <nichayamaha> atu enge? [Spad]
Kumar surely go-PST-3SM surely DEM where
‘Kumar went, where is that for sure?’

6. Tamil sluicing

In this section, we introduce the basic properties of sluicing in Tamil. Tamil distinguishes between two types of Tamil which differ primarily in terms of the case realization of the wh-sluice. The first type is called ‘case-marked (CM) sluicing’ (section 6.1) and the second type is ‘non-case-marked (NCM) sluicing’ (section 6.2).

6.1. Case-marked (CM) sluicing

As the name suggests, CM sluicing means that grammatical case is overtly marked on the wh-sluice. Examples in (35) show that the grammatical case of the wh-sluice is identical to that of its antecedent correlate (accusative for (35)a, and dative for (35)b):

(35) a. murugan yaar-ai-yo santi-tt-aan, aanal yaar-ai
Murugan s.o-ACC-INDEF meet-PST-3SM but who-ACC
endru teriya-villai.
that know-NEG
‘Murugan met someone, but I don’t know who.’

b. kumaar yaar-ukk-o puttahat-ai koDu-tt-aan, aanal yaar-ukku
Kumar s.o-DAT-INDEF book-ACC give-PST-3SM but who-DAT
endru ninai-villai.
that remember-NEG
‘Kumar gave someone a book, but I don't remember who.’

The observation that the wh-sluice can bear grammatical case of its antecedent correlate is widely attested across languages (Ross 1969; Chung, Ladusaw, and McCloskey 1995; Merchant 2001; Ince 2006, 2009, 2012; Van Craenenbroeck 2010a,b), and this always suggests to linguists that the wh-sluice is placed at the case-marked position at the underlying level, and moreover that the underlying structure of the sluiced clause contains a full-fledged CP. A few observations lead us to this conclusion. First, in all cases, the wh-sluice must be accompanied by the complementizer *endru* ‘that’. Example (36) indicates clearly that *endru* is obligatorily required in embedded declaratives and interrogatives:

(36) a. kumaar ardʒuna-vai veru-kir-aan *(endru) ena-kku teriyum.
Kumar Arjuna-ACC hate-PRES-3SM that 1S-DAT know
‘I know that Kumar hates Arjuna.’

b. yaar ardʒuna-vai santi-tt-aan *(endru) ena-kku teriya-villai.
who Arjuna-ACC meet-PST-3SM that 1S-DAT know-NEG
'I don't know who met Arjuna.'

The presence of *endru* is mandatory in CM sluicing, as shown by (37):

(37) … aanal, yaar-ai *(endru) teriya-villai.
but who-ACC that know-NEG
'…, but I don't know (that) who.'

Another observation stems from the flexible position of the wh-sluice. Recall that wh-expressions cannot be RD-ed in simple questions. By contrast, declarative or interrogative clauses can be RD-ed with additional pragmatic effects. Example (38)a and (39)a represent the unmarked preverbal position of the embedded CP, whereas (38)b and (39)b are uttered with the speaker's special attitude:[13]

(38) a. kumaar ardʒuna puttisaali endru ninai-tt-aan.
Kumar Arjuna smart that think-PST-3SM
'Kumar thought that Arjuna was smart.'
b. kumaar ninai-tt-aan, ardʒuna puttisaali endru.
Kumar think-PST-3SM Arjuna smart that
'Kumar thought, that Arjuna was smart.'

(39) a. kumaar-kku ardʒuna puttisaali endru terinji-kolla venum.
kumar-DAT Arjuna smart that know-to want
'Kumar wanted to know if Arjuna was smart.'
b. kumaar-kku terinji-kolla venum, ardʒuna puttisaali endru.
Kumar-DAT know-to want Arjuna smart that
'Kumar wanted to know, if Arjuna was smart.'

Interestingly, the CM wh-sluice can be postverbal. Example (40) shows that the wh-sluice can be preverbal (which is the unmarked position) and postverbal (which can be separated by a pause):[14]

(40) … aanal <yaar-ai endru > teriya-villai, <yaar-ai endru>.
… but <who-ACC that> know-NEG who-ACC that
'… but I don't know who.'

These suffice to show that it is the embedded CP containing the wh-sluice that is RD-ed. The third observation to support the hypothesis that CM sluicing involves a full-

[13] For instance, the (b) examples imply that the speaker makes a joke about Kumar's positive opinion of Arjuna.
[14] Thanks to one reviewer for pointing out this possibility.

fledged interrogative CP stems from the referential interpretation of the wh-sluice. As indicated in (41), the accusative wh-sluice *enta puttahatai* 'which book' allows a sloppy reading, i.e. I wondered which book I wanted to buy:

(41) kumaar enta puttahat-ai vaang-a-venum endru ninai-tt-aan,
kumar which book-ACC buy-INF-want that wonder-PST-3SM
naan-um enta puttahat-ai endru ninai-tt-een.
1s-also which book-ACC that wonder-PST-1s
'Kumar wondered which book he wanted to buy, I also wondered which book (I wanted to buy).'

The occurrence of CM sluicing extends to the case of multiple sluicing. Recall that case-marked wh-expressions can be multiply scrambled (18). In the case of CM sluicing, the wh-sluices can also be scrambled. In the examples in (42) and (43), the linear order between the various wh-sluice can change without any effect on the grammaticality and interpretation:

(42) a. yaar-o et-ai-yo vaang-in-aan, aanal yaar et-ai endru
s.o-INDEF s.t-ACC-INDEF buy-PST-3SM but who what-ACC that
teriya-villai.
know-NEG
'Someone bought something, but I don't know who what.'
b. yaar-o et-ai-yo vaang-in-aan, aanal et-ai yaar endru
s.o-INDEF s.t-ACC-INDEF buy-PST-3SM but what-ACC who that
teriya-villai.
know-NEG
'Someone bought something, but I don't know what who.'

(43) a. kumaar oruvar-ukku et-ai-yo koDu-tt-aan, aanal yaar-ukku
Kumar person-DAT thing-ACC-INDEF give-PST-3SM but who-DAT
et-ai endru teriya-villai.
what-ACC that know-NEG
'Kumar gave a person something, but I don't know who what.'
b. kumaar oruvar-ukku et-ai-yo koDu-tt-aan, aanal et-ai
Kumar person-DAT thing-ACC-INDEF give-PST-3SM but what-ACC
yaar-ukku endru teriya-villai.
who-DAT that know-NEG
'Kumar gave a person something, but I don't know what who.'

The CM wh-sluice does not observe any island constraints (44), which is compatible with the claim that the wh-sluice is the result of overt scrambling followed by TP-domain deletion at the level of PF (Merchant 2001):[15]

(44) a. ardʒuna kumaar yaar-ai-o kon-dr-aan endra vatanti-ai ke-tt-aan,
Arjuna Kumar s.o-ACC kill-PST-3SM that rumor-ACC hear-PST-3SM
aanal yaar-ai endru teriya-villai.
but who-ACC that know-NEG
'Arjuna heard the rumor that Kumar killed someone, but I don't know who.'

b. kottam kumaar yaar-ai-o aDi-TT-a pirahu muDi-nt-atu,
party Kumar s.o-ACC-INDEF beat-PST-3SM after finish-PST-3SN
aanal yaar-ai endru teriya-villai.
but who-ACC that know-NEG
'The party finished after Kumar beat someone, but I don't know who.'

To summarize the above findings:

(45) a. In Tamil CM sluicing, the wh-sluice is contained within an embedded interrogative CP at the underlying level.
b. Multiple CM sluicing is grammatical.
c. The CM wh-sluice does not observe any island constraint.

6.2. Non-case-marked (NCM) sluicing

In addition to CM sluicing, there exists another sluicing strategy in Tamil, in which the wh-sluice does not realize morphological case regardless of the case of the antecedent correlate (46):[16, 17]

(46) a. Murugan yaar-ai-o santi-tt-aan, aanal yaar endru
Murugan s.o-ACC-INDEF meet-PST-3SM but who that
teriya-villai.

[15] We are not claiming here that the derivation of the wh-sluice in Tamil must be the result of TP-deletion at PF. Dravidianists question whether Tense as a syntactic category exists in Dravidian languages (Amritavalli and Jayaseelan 2005; Amritavalli 2014). They propose a segregation between Tense and Finiteness, and claim that the semantic function of Tense as anchoring events (Enç (1987)) can be expressed by Mood. The current paper does not attempt to enter the Tense/Finiteness debate in Tamil, while upholding the claim that in the derivation of wh-sluice, PF-deletion applies to a domain sandwiched between CP and vP (e.g. MoodP or AspP).

[16] The co-occurrence of CM and NCM sluicing has also been noted in other languages such as Japanese (e.g. Takahashi 1994; Fukaya and Hoji 1999; Fukaya 2007, 2012), which leads to the inquiry of the derivational mechanism of the two types of sluicing.

[17] The occurrence of NCM sluicing also refutes Balusu's (2016) claim that the wh-sluice in Dravidian languages (which means Telugu in his data) must bear the same case as its antecedent correlate. See section 8 for more discussion.

know-NEG
'Murugan met someone, but I don't know who.'

b. kumaar yaar-ukk-o puttahat-ai koDu-tt-aan, aanal yaar endru
Kumar s.o-DAT book-ACC give-PST-3SM but who that
ninai-villai.
remember-NEG
'Kumar gave someone a book, but I don't know who.'

The observation that morphological case is optional for wh-sluice is verified in the following example. (47) shows that both *enna* and *etai* 'what' can be used as the wh-sluice without any meaning change:

(47) kumaar et-ai-yo vaang-in-aan, aanal ena-kku enna/et-ai
Kumar something-ACC-INDEF buy-PST-3SM but I-DAT what/what-ACC
endru teriya-villai.
that know-NEG
'Kumar bought something, but I don't know what.'

One ensuing question is whether the CM (e.g. *etai*) and NCM (e.g. *enna*) wh-sluice only differ in the morphological case, or if they are distinct at the fundamental level. To answer this question, first, it is evident that the wh-sluice in both CM and NCM sluicing must be contained within a CP structure, even though their internal configurations may be different. Similar to CM sluicing, the wh-sluice in NCM sluicing must be accompanied by the complementizer *endru*, a clear indication that a CP within the sluiced clause is projected at the underlying level:

(48) a. Murugan yaar-ai-o santi-tt-aan, aanal yaar *(endru)
Murugan s.o-ACC-INDEF meet-PST-3SM but who that
teriya-villai.
know-NEG
'Murugan met someone, but I don't know who.'

b. Kumar et-ai-yo vaang-in-aan, aanal ena-kku enna
Kumar something-ACC-INDEF buy- PST-3SM but I-DAT what
*(endru) teriya-villai.
that know-NEG
'Kumar bought something, but I don't know what.'

Second, the NCM wh-sluice can be postverbal which is untypical of wh-expressions (cf. (20))):

(49) Murugan yaar-ai-o santi-tt-aan, aanal teriya-villai yaar endru.
Murugan s.o-ACC-INDEF meet-PST-3SM but know-NEG who that
'Murugan met someone, but I don't know who.'

These lead us to the following claim which is similar to CM sluicing:

(50) In Tamil non-case-marked sluicing, the wh-sluice is contained within an embedded interrogative CP at the underlying level.

While it is evident that NCM sluicing stems from an underlying CP, it is also clear that the CP structure is not a full-fledged wh-question. As we pointed out previously, case is obligatorily marked on arguments in wh-questions. NCM wh-expressions are strictly banned:

(51) * ardʒuna yaar kan-D-aan?
Arjuna who see-PST-3SM?

In another context, NCM wh-sluices can be found in fragment questions. (52) shows that the wh-sluice can carry accusative case (i.e. *yaarai*), but case marking is optional (i.e. *yaar*):

(52) A: ardʒuna yaar-ai-o santi-tt-aan.
Arjuna s.o-ACC-INDEF meet-PST-3SM
'Arjuna met someone.'
B: yaar/yaar-ai?
who/who-ACC
'Who?'

More importantly, the NCM wh-sluice can also be accompanied by demonstrative which reminds us of Spad (section 5.3) (53):

(53) Murugan yaar-ai-o santi-tt-aan, aanal atu yaar endru
Murugan s.o-ACC-INDEF meet-PST-3SM but DEM who that
teriya-villai.
know-NEG
'Murugan met someone, but I don't know who (that is).'

The demonstrative *atu* can be used with any NCM wh-sluice, e.g. *enge* 'where' and *yen* 'why':

(54) a. ardʒuna kumaar-ai santi-tt-aan, aanal atu enge endru
Arjuna Kumar-ACC meet-PST-3SM but DEM where that
teriya-villai.
know-NEG
'Arjuna met Kumar, but I don't know where that is.'
b. ardʒuna kumaar-ai aDi-TT-aan, aanal atu yen endru teriya-villai.

Arjuna Kumar-ACC beat-PST-3SMbut DEM why that know-NEG
'Arjuna beat Kumar, but I don't know why that is.'

The demonstrative can be used with NCM wh-expressions in fragment answers:

(55) A: Murugan yaar-ai-o santi-tt-aan.
Murugan s.o-ACC-INDEF meet-PST-3SM
'Murugan met someone.'
B: atu yaar?
DEM who
'Who is that?'

If the identity of the NCM wh-sluice is discourse-salient, a personal pronoun can be used instead of the demonstrative *atu*:

(56) Murugan yaar-ai-o santi-tt-aan, aanal avan/aval yaar
Murugan s.o-ACC-INDEF meet-PST-3SM but 3SM/3SF who
endru teriya-villai.
that know-NEG
'Murugan met someone, but I don't know who he/she is.'

It is clear that the use of a demonstrative/pronoun with the wh-sluice is exclusive to NCM sluicing. Notice that the demonstrative can never be used with a CM wh-sluice (57)-(58):

(57) *Murugan yaar-ai-o santi-tt-aan, aanal atu yaar-ai endru
Murugan s.o-ACC-INDEF meet-PST-3SM but DEM who-ACC that
teriya-villai.
know-NEG

(58) A: Murugan yaar-ai-o santi-tt-aan.
Murugan s.o-ACC-INDEF meet-PST-3SM
'Murugan met someone.'
B: *avar yaar-ai?
DEM who-ACC

These peculiar properties suggest that NCM sluicing involves a distinct underlying structure from CM sluicing. Assuming that the NCM wh-sluice must stem from an underlying wh-question, there are only three possible wh-constructions (section 5). We have demonstrated that the NCM wh-sluice is incompatible with simple wh-

questions (section 5.1) and cleft questions (section 5.2).[18] Example (59) and (60) show that the use of an NCM wh-sluice with a demonstrative is ungrammatical:

(59) a. * ardʒuna atu yaar-ai kan-D-aan? (simple wh-questions)
Arjuna DEM who-ACC see-PST-3SM?
b. *Anand atu et-ai eLuth-in-aan?
Anand DEM what-ACC write-PST-3SM

(60) a. *poo-n-atu atu yaaru?
go-PST-NOM DEM who
b. *kumaar poo-n-atu atu enge? (cleft questions)
Kumar go-PST-NOM DEM where

Interestingly, NCM sluicing appears to be compatible with Spad (section 5.3). Both NCM wh-sluice and Spad are zero-case-marked, and moreover can be accompanied by a demonstrative/pronoun which is not attested in simple and cleft questions. Recall that Spad is a biclausal configuration and adverbs are placed in the consequent clause (34). The same adverb placement condition is found in NCM sluicing:

(61) a. Murugan yaar-ai-o santi-tt-aan, aanal nichayama yaar endru
Murugan s.o-ACC-INDEF meet-PST-3SM but surely who that
teriya-villai.
know-NEG
'Murugan met someone, but I don't know who for sure.'
b. ardʒuna kumaar-ai santi-tt-aan, aanal nichayama enge endru
Arjuna Kumar-ACC meet-PST-3SM but surely where that
teriya-villai.
know-NEG
'Arjuna met Kumar, but I don't know where for sure.'
c. ardʒuna kumaar-ai aDi-TT-aan, aanal nichayama yen endru
Arjuna Kumar-ACC beat-PST-3SM but surely why that
teriya-villai.
know-NEG

[18] A reviewer questions whether cleft questions can be the underlying source of NCM sluicing, pointing out that the nominalizing suffix *–atu* in cleft questions may become a homophonous demonstrative *atu* in NCM sluicing. While there may be diachronic evidence showing that the demonstrative *atu* and the nominalizing suffix *–atu* are derived from the same historical source, it is still insufficient to state that cleft questions are the underlying source for NCM sluicing from a synchronic point of view. First, the NCM sluiced clause must be preceded by a simple sentence with a fully-inflected verb, whereas the nominalized verb is not inflected with phi-features. Second, the following sentence shows that the nominalizing suffix *–atu* and the demonstrative *atu* (which assume different roles) cannot coexist:

(i) *kumar poo-n-atu, atu enge?
Kumar go-PST-NOM DEM where

‘Arjuna beat Kumar, but I don’t know why for sure.’

In addition, it is always possible to replace the NCM sluiced clause with Spad as the embedded question, e.g. (62):

(62) … aanal ena-kku [kumaar yaar-ai-o kan-D-aan, atu yaar endru]
but I-DAT Kumar s.o-ACC see-PST-3SM DEM who that
teriya-villai
know-NEG
‘…, but I don’t know who Kumar saw.’
(lit. …, but I don’t know Kumar saw someone, (and) who that is.)

The claim that NCM sluicing is derived from Spad can be further verified by the strict reading of the NCM wh-sluice. In (63), the NCM wh-sluice *enta puttahatai* ‘which book’ only receives a strict reading, i.e. Akeela also wondered which book Kumar (not Akeela) should read:

(63) kumaar [enta puttahat-ai vaanga-venum endru] ninai-tt-aan,
Kumar which book-ACC buy.INF-want that wonder-PST-3SM
akila-um [enta puttaham endru] ninai-tt-aaL.
Akeela-also which book that wonder-PST-3SF
‘Kumar wondered which book to buy, and Akeela also wondered which book.’

Furthermore, NCM sluicing strictly bans multiple sluicing. Recall that multiple sluicing is grammatical only if the wh-sluices carry grammatical case. Our claim that NCM sluicing stems from Spad further describes this restriction, i.e. multiple wh-questions do not exist in Spad. Observe the contrast between (64) and (65):

(64) a. yaar et-ai vaang-in-aan? (simple wh-questions: ok)
who what-ACC buy-PST-3SM
‘Who bought what?’
b. yaar et-ai? (CM wh-sluice: ok)
who what-ACC
c. yaar-o et-ai-yo vaang-in-aan, aanal yaar et-ai endru
s.o-INDEF s.t-ACC-INDEF buy-PST-3SM but who what-ACC that
teriya-villai. (CM sluicing: ok)
know-NEG
‘Someone bought something, but I don’t know who what.’

(65) a. *atu yaar enna? (Spad: not ok)
DEM who what
b. *yaar enna? (NCM wh-sluice in fragment questions: not ok)
who what

c. *yaar-o et-ai-o vaang-in-aan, aanal yaar edu endru
s.o-INDEF sth-ACC-INDEF buy-PST-3SM but who what that
teriya-tu. (NCM sluicing: not ok)
know-NEG

Assuming that NCM sluicing is derived from Spad, its insensitivity to island constraints can be naturally described. The NCM wh-sluice in (66)a,b is not contained within an island. No scrambling whatsoever exists in the course of derivation:

(66) a. ardʒuna kumaar yaar-ai-o kon-dr-aan endra vatanti-ai
Arjuna Kumar s.o-ACC-INDEF kill-PST-3SM that rumor-ACC
ke-tt-aan, aanal yaar endru teriya-villai.
hear-PST-3SM but who that know-NEG
'Arjuna heard the rumor that Kumar killed someone, but I don't know who.'
b. koottam kumaar yaar-ai-o aDi-tt-a pirahu muDi-nt-atu,
party Kumar s.o-ACC-INDEF beat-PST-3SM after finish-PST-3SN
aanal yaar endru teriya-villai.
but who that know-NEG
'The party finished after Kumar beat someone, but I don't know who.'

To summarize the distinction between CM and NCM sluicing so far:

(67) a. Both CM and NCM sluicing are derived from an underlying CP structure.
b. CM and NCM sluicing differ in (i) the realization of grammatical case on the wh-sluice, (ii) the occurrence of a demonstrative/pronoun with the wh-sluice, and (iii) adverb placement.
c. CM sluicing is derived from a full-fledged wh-question, whereas NCM sluicing is derived from Spad (Sluicing Plus A Demonstrative).
d. The CM wh-sluice receives a sloppy reading, whereas the NCM wh-sluice receives a strict reading.
e. CM sluicing licenses multiple sluicing, whereas NCM sluicing forbids it.
f. CM and NCM sluicing do not observe island constraints, but by different reasons. The CM wh-sluice undergoes leftward scrambling to CP-initial position followed by TP-domain deletion at PF. The NCM wh-sluice does not undergo any scrambling operation throughout derivation.

7. Does CM sluicing involve A- or A'-movement?

The previous sections conclude that there are two types of sluicing which stems from two underlying sources. In this section, we focus on CM sluicing in which the wh-sluice is argued to undergo some movement/scrambling operation in the course of derivation. While this does not constitute the bulk of this paper, some discussion about the scrambling operations in Tamil is necessary. In the following sections, we shall

discuss some previous analyses of the scrambling operation in Tamil (section 7.1). We shall also claim that NPs and wh-words are involved in distinct scrambling operations (section 7.2).

7.1. Previous analyses of Tamil scrambling and their problems

Assuming that CM sluicing is derived from a full-fledged wh-question, one immediate question concerns its detailed derivational mechanism. Given that Tamil is a free word order language and scrambling of wh-expressions is relatively free, we need to investigate the type of operation wh-scrambling is involved in. In this section, we discuss the work by Annamalai (2000, 2003) and Sarma (2003), and conclude that most of the typical diagnostics for A/A'-movement are vacuous in Tamil scrambling.

Previous works on the movement operation for scrambling abound. For instance, some consider scrambling as an instance of A-movement (Fanselow 1990; Moltmann 1990; Santorini 1991; Miyagawa 1997, 2003, 2010), whereas others consider it as an instance of A'-movement (Saito 1985, 1992, 2003; Müller and Sternefeld 1994). There also exists a third possible analysis which analyzes scrambling as a structure with mixed A- and A'-properties (Webelhuth 1988, 1992; Mahajan 1990). Corver and Van Riemsdijk (1994) therefore conclude that there is no consensus as to a correct theory of free word order phenomena and moreover scrambling. In the literature of Tamil syntax, Sarma (2003) claims that literary Tamil scrambling exhibits the properties of A'-movement, based on the following list of diagnostics:

(68) a. A-bar movement does not amnesty weak crossover (WCO) effect.
b. A-bar movement can induce Condition C reconstruction.
c. A-bar movement neither creates nor destroys binding relations.
d. A-bar movement does not alter scopal relation.
e. A-bar movement licenses parasitic gaps.

A lot of caution is in order after serious consideration of Sarma's classification and moreover Tamil data. First, most A-bar diagnostics may not directly apply to Tamil. To name one example, it is famously known that wh-movement in English can induce the WCO effect (Lasnik and Saito 1992; Safir 2004, among others), e.g. (69)a. The same WCO effect induced by wh-movement across a bound variable finds a beautiful parallel in quantifier raising at LF. (69)b is argued to be ungrammatical since the QNP LF-moves and crosses the bound variable (Postal 1971, 1993; Lasnik and Stowell 1991):[19]

[19] It is not always the case that A'-movement always induces WCO effect. For instance (Lasnik and Stowell 1991: 691):
a. Who$_i$ t_i will be easy for us [to get [his$_i$ mother] to talk to e_i]?
b. Who$_i$ did you stay with t_i [before [his$_i$ wife] had spoken to e_i]?
c. This book$_i$, I expect [its$_i$ author] to buy e_i
d. This book$_i$, [which [[its$_i$ author] wrote t_i last week]], is a hit.

(69) a. ?*Who$_i$ did [his$_i$ best friend] hit t_i?
b. *His$_i$ best friend hit [every student]$_i$.

However, Tamil behaves differently with regards to the WCO effect. Example (70)a is ungrammatical. However, (70)b shows that overt object scrambling of the wh-expression over the bound pronoun amnesties the WCO effect (Annamalai 2000, 2003):

(70) a. *avan-ga$_i$ ammaa-vee yaar-ai$_i$ veru-pp-aanga?
3PL-GEN mother-EMP who-ACC hate-FUT-3PL
b. yaar-ai$_i$ avan-ga$_i$ ammaa-vee veru-kr-aanga?
who-ACC 3PL-GEN mother-EMP hate-PRES-3PL
*Who$_i$ does their$_i$ mother hate?

The WCO-amnestying effect by overt wh-scrambling is still in effect even though another anaphor *tangal* 'self' is used:

(71) a. *tangal-udaiya sakotarar yaar-ai$_i$ aDi-tt-aar-kal?
self-GEN brother who-ACC hit-PST-3PL
b. yaar-ai$_i$ tangal-udaiya sakotarar t_i aDi-tt-aar-kal?
who-ACC self-GEN brother hit-PST-3PL
'Who$_i$ did his$_i$ (own) brother hit?'

As a result, either Tamil wh-scrambling does not support the A'-movement analysis (as Sarma did), or the conditions which induce or amnesty the WCO effect should be parametricized.[20] To complicate the matter further, Annamalai (2003) points out that overt object scrambling over a wh-operator does not have any effect on the WCO (72):

(72) a. yaaru$_i$ tanga$_i$ ammaa-vai-yee veru-pp-aan-ga?
who self-GEN mother-ACC-EMP hate-PRES-3SM
b. tanga$_i$ ammaa-vai-yee yaaru$_i$ veru-pp-aan-ga?
self-GEN mother-ACC-EMP who hate-PRES-3SM
'Who$_i$ hates his$_i$ mother?

Based on these observations, Annamalai claims that the ungrammatical status of (70)a is not due to wh-scrambling at LF, but the linear precedence of the bound pronoun (Annamalai 2003: 39):

[20] The same WCO-amnestying capacity of wh-scrambling is also observed in Hindi (Mahajan 1990) and Japanese (Tada 1993).

(73) The pronoun must always follow the wh-antecedent.[21]

The claim that binding conditions (which subsume the WCO effect) in Tamil are (at least partially) governed by linear order can be verified by the observation of Condition C violation. The contrast in (74) can be straightforwardly explained by linear order. (74)a is ungrammatical since the bound pronoun linearly precedes its antecedent 'Kumar'. Object scrambling to the sentence-initial position in (74)b alters the precedence relation between 'Kumar' and the bound variable, which is grammatical:[22, 23]

(74) a. *avan$_i$ kumaar$_i$-udaiya sakotari-ai aDi-tt-aan.
3SM Kumar-GEN sister-ACC beat-PST-3SM
b. kumaar$_i$-udaiya sakotari-ai avan$_i$ aDi-tt-aan.
Kumar-GEN sister-ACC 3SM beat-PST-3SM
'Kumar$_i$'s sister, he$_i$ beat.'

The same linear condition applies to the following contrast:

(75) a. kumaar-udaiya sakotari avan-ai aDi-tt-aaL.
Kumar$_i$-GEN sister 3SM-ACC beat-PST-3SF
'Kumar's sister beat him.'
b. *avan-ai kumaar-udaiya sakotari aDi-tt-aaL.
3SM-ACC Kumar$_i$-GEN sister beat-PST-3SF

And moreover to wh-questions (76):

(76) a. *avan$_i$ [kumaar$_i$-udaiya enta sakotari-ai] veru-kir-aan?

---

[21] Notice that this linear precedence condition only applies to pronouns, but not to anaphors, and has nothing to say about the grammaticality of (72). For the grammatical distinction between pronouns and anaphors in Tamil, please refer to Annamalai (2000).

[22] Annamalai (2000: 201) furthermore points out there are cases in which the pronoun can precede its antecedent without inducing Condition C violation. Example (i) is grammatical with the coreferential reading, showing that a non-subject (or non-c-commanding) pronoun can precede it antecedent:

(i) avan$_i$ tambi-yee kumaar-ai$_i$ veru-kkr-aan.
3SM brother-EMP Kumar-ACC hate-PRES-3SM
'His$_i$ brother himself hates Kumar$_i$.'

[23] For reasons which remain unknown, the following sentence is ungrammatical, showing that reconstruction to Condition C violation is possible (Annamalai 2000: 202):

(i). *kumaar$_i$ tambiy-ai avan$_i$ veru-kr-aan.
Kumar brother-ACC 3SM hate-PRES-3SM
*'He$_i$ hates Kumar$_i$'s brother.'

However it should be noted that the genitive antecedent 'Kumar' does not bear any case. On the other hand, our informants report that (ii) is grammatical if Kumar bears genitive case:

(ii) kumaar-udaiya$_i$ tambiy-ai avan$_i$ veru-kr-aan.
Kumar-GEN brother-ACC 3SM hate-PRES-3SM

3SM Kumar-GEN which sister-ACC hate-PST-3SM

b. [kumaar$_i$-udaiya enta sakotari-ai] avan$_i$ veru-kir-aan
Kumar-GEN which sister-ACC 3SM hate-PST-3SM?
'Which Kumar$_i$'s sister did he$_i$ hate?'

Note that it may be possible to describe the list of contrast by claiming that NP-scrambling is A-movement (though we shall argue that it is, yet by other considerations) which does not reconstruct the scrambled element to the base position. This line of thought is not in conflict with the recent thesis of Lebeaux (2009) who claims that Condition C applies throughout the entire derivation. According to Lebeaux, as long as Condition C violation is induced at some point during the derivation, the violation is permanent and cannot be rescued by other operations. Such a ubiquitous property of Condition C violation describes the ungrammatical status of (74)a, (75)b and (76)a, as there exists a derivational point (e.g. at the point of Spell-out) at which Condition C violation is incurred. However, this analysis may be premature since it leaves the anti-reconstruction of (70)b unexplained. Moreover such hypothesis is less parsimonious since the WCO effect induced by the in-situ wh-word in (70)a would merit an ad-hoc description.

These aforementioned observations entail that the use of binding conditions and the WCO effect cannot serve as a reliable diagnostic of A/A'-movement for Tamil scrambling. Our doubt for the applicability of the conditions in (68) as a test for Tamil scrambling extends to parasitic gaps. It is not evident whether Tamil possesses parasitic gap constructions analogous to typical examples demonstrated in English or Swedish. It is mainly because Tamil is a wh-in-situ language, whereas typical parasitic gaps must be licensed by an A'-position, e.g. (77)a is a case of wh-movement, and (77)b operator movement (Engdahl 1983):

(77) a. Which articles did John file *t* without reading *pg*?
b. This is the kind of food you must cook *t* before you eat *pg*.

Scrambled wh-expressions can be related to their base position in Tamil, and so can be in-situ expressions, e.g. (78) (examples adjusted from Sarma (2003: 250-251)). However this does not suffice to claim that they license parasitic gap, since the gap position may allow an optional object pronoun:[24]

(78) a. dharma enda puttahat-ai paDikk-aama (at-ai) tolai-tt-aan?
Dharma which book-ACC reading-NEG it-ACC lose-PST-3SM
'Which book did Dharma lose without reading (it)?'
(lit. Dharma lost without reading which book?)

b. dharma tan puttahat-ai paDikk-aama (at-ai) tolai-tt-aan.
Dharma self book-ACC reading-NEG it-ACC lose-PST-3SM

[24] See Jayaseelan (2008) for related discussion in Malayalam. The doubt extends to other wh-in-situ languages, e.g. Hindi (Bhatt 2003).

'Dharma lost his (own) book without reading (it).'

These facts lead us to the refute Sarma's analysis of Tamil scrambling as involving A'-movement. Another major problem is that Sarma seems to ignore the distinction between NP- and wh-scrambling, which will be further discussed in the following section.

7.2. Is NP-scrambling A-movement and wh-scrambling A'-movement?

Another major problem of Sarma's analysis of Tamil scrambling as involving A'-movement stems from her claimed unification of NP- and wh-scrambling. Given that most of the aforementioned diagnostics of A'-movement do not exert any force on Tamil, the only diagnostic of A'-movement is scope relation. NP- and wh-scrambling, however, demonstrate differences in scope. Overall, NP-scrambling in Tamil does not alter scope relation. This observation is also noted in Sarma (2003: 248). Both examples in (79) allow a fixed scope reading, according to which the pronoun *yaar* receives a wide-scope reading:

(79) muuNu peer yaar-ai-o paar-tt-aa.
three people s.o-ACC-INDEF see-PST-3PL
'Three people saw someone.' (∃>3, *3>∃)
b. yaar-ai-o muuNu peer paar-tt-aa. (∃>3, *3>∃)
c. muuNu peer paar-tt-aa yaar-ai-o. (∃>3, *3>∃)

Sometimes, it is possible for a sentence to be scope-ambiguous. This is indicated in (80), in which object scrambling does not resolve scope ambiguity (this example is suggested by one reviewer):

(80) a. ellaarum (aaLukku) oru saamaan vaank-in-oom.
all person-to one thing buy-PST-1PL
'All (of us) bought a thing (each).' (∀>∃,∃>∀)
b. (aaLukku) oru saamaan ellaarum vaank-in-oom.
person-to one thing all buy-PST-1PL (∀>∃,∃>∀)

By contrast, the scope reading of wh-words is completely different from that of NPs. It depends on the nature of wh-expressions, and moreover it cannot be ambiguous. In (81)a and (82)a, *enta napar* 'which person' bears a surface wide scope over *anaivaraium* 'everyone'. The wide scope of the wh-word is not altered by scrambling, e.g. (81)b and (82)b. Both questions require a single-person answer:

(81) a. enta napar anaivar-ai-um virumbu-kir-aar?
which person everyone-ACC love-PRES-3SM

'Which person loves everyone?' (wh>∀, *wh>∀)

b. anaivar-ai-um enta napar virumbu-kir-aar? (wh>∀, *wh>∀)

(82) a. anaivar-um enta napar-ai virumbu-kir-aar-kaL?
everyone-NOM which person-ACC love-PRES-3PL
'Which person does everyone love?' (wh>∀, *wh>∀)

b. enta napar-ai anaivar-um virumbu-kir-aar-kaL? (wh>∀, *wh>∀)

However, there exists a type of distributive wh-word that yields a distinct scope reading. To begin with, Tamil distributive pronouns can be expressed by reduplication (83) (Lehmann 1993):

(83) a. avan-avan
3SM-3SM
'each different male person'

b. avaL-avaL
3SF-3SF
'each different female person'

c. atu-atu
3SN-3SN
'each different thing'

d. avar-avar
one-one
'each different person (hon.)'

Wh-words can also be reduplicated in the same fashion to yield a group/distributive reading.[25] In most cases, they can be used to express a pair-list reading of wh-questions (also pointed out in Sarma (2003: 249)). Example (84) shows that *yaaryaarai* 'who' can express a distributive or a group reading. In one interpretation (∀>wh), the question requires a pair-listed answer. If the question is interpreted collectively (wh>∀), it asks which particular person is such that everyone saw that person. It should be pointed out that wh-scrambling across the quantifier (84)b does not have any effect on the scope reading (also in Sarma 2003):

(84) a. ellorum yaar-yaar-ai kaND-aar-kaL? (∀>wh, wh>∀)
everyone who-who-ACC see-PST-3PL
'Who did everyone see?'

b. yaar-yaar-ai ellorum kaND-aar-kaL? (∀>wh, wh>∀)

[25] The use of wh-doublets to express plurality and distributivity of wh-expressions has been observed in other languages, e.g. Korean (Chung 1999), Yaeyaman, (Davis 2016), etc.

Up to now, NP- and wh-scrambling display the same result regarding the scrambling effect on scope reading. Scrambling does not alter scope reading, and the actual scope reading depends on the lexical meaning of individual expressions (for NPs) and the identity of wh-operators (for wh-expressions).[26] Is there any way to distinguish the two types of scrambling? The facts from negation further show that scrambling does not have any effect on scope. In Tamil (and other Dravidian languages), the negative morpheme is suffixed to the tenseless verb. We assume that in the derivation of negative verbs in Tamil, V raises to Neg and moreover to a higher projection such as T/Asp.[27] As a result, Neg always scopes over the constituents within the TP-domain, and this describes the fact that the wide scoping of negation is unaltered by NP-scrambling. All examples in (85) and (86) have the fixed scope relation ¬>∀, whereas the inverted scope ∀>¬ is unavailable:

(85) a. kumaar ella puttahat-ai-um vaanga-villai.
kumar all book-ACC-also buy-NEG
'Kumar did not buy all books.' (¬>∀, *∀>¬)
b. ella puttahat-ai-um kumaar vaanga-villai.
all book-ACC-also kumar buy-NEG
c. kumaar vaanga-villai ella puttahat-ai-um.
kumar buy-NEG all book-ACC-also

(86) ellarum vara-villai.
All.people come-NEG (¬>∀, *∀>¬)
'Not all people came.'

To express the meaning 'No people came', Tamil requires a negative NP with a negative verb. The negative NP can be understood as a negative concord which is scoped over by the negation at the TP-domain (87):

(87) a. evarum vara-villai.
no.people come-NEG
'no one came.'
b. *evarum va-nt-aar-kaL.

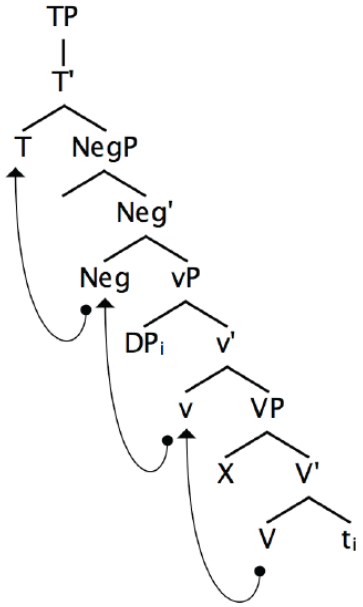
[26] Notice that it is plausible to analyze in-situ wh-expressions (including single and distributive wh-words) without resort to LF movement for scope-taking purposes. This involves interpreting the in-situ wh-word as as variable of a choice function (instead of an individual). For technical details, please refer to Reinhart (1998). The analysis of in-situ wh-expressions without LF movement (e.g. to Spec-CP) also implicates that wh-scrambling may not be driven in the narrow syntax (by means of satisfying some formal feature). It is therefore plausible to suggest that Tamil scrambling is phonological, and precedes TP-domain deletion to derive the wh-sluice. For a similar conclusion about non-movement in wh-words in Tamil, please refer to Annamalai (2003). For the opposing argument that in-situ wh-words move in narrow syntax in other Dravidian languages please see Jayaseelan's (1996) discussion of Malayalam.

[27] In this paper, we leave the issues of clause structures of Tamil aside. Amritavalli and Jayaseelan (2005) propose that Dravidian clausal structure includes the functional projection of MoodP and AspP and further obviates with the need for a TP. The use of TP in this paper (including the tree diagrams) is just a shorthand expression of the thetic domain.

no.people come-PST-3PL

These facts reveal that NP-scrambling does not go beyond the TP-domain, hence an instance of A-movement (e.g. to Spec-vP). The tree diagram (88) shows clearly that NP/DP-scrambling lands at Spec-vP which remains within the scope of the raised negation:[28]

(88)



By contrast, the identity of wh-operators predetermines its scope reading, and moreover, they are always interpreted as bearing a wide scope over the negation. Example (89) and (90) ask for the person/group of people such that Arjuna did not like. They cannot mean that Arjuna liked some people and ask which other people are such that Arjuna did not like.

(89) a. ardʒuna yaar-ai virumba-villai? (wh>¬, *¬>wh)
Arjuna who-ACC like-NEG
'Who didn't Arjuna like?'
b. yaar-ai ardʒuna virumba-villai? (wh>¬, *¬>wh)
who-ACC Arjuna like-NEG

(90) a. ardʒuna yaar-yaar-ai virumba-villai? (wh>¬, *¬>wh)

[28] This claim that discourse-related NP-scrambling is analyzed as A-movement is reminiscent of Miyagawa's (1997, 2003, 2010) analysis of Japanese scrambling. Miyagawa postulates that discourse-oriented scrambling of NPs is driven by formal features under the TP-domain which are independent of typical movement-driven features such as phi-features. He proposes that there exists an independent functional projection above TP but below CP, which hosts the sentential topic (called it αP). A typical instance of the sentential topic element is Japanese nominative case marker *–ga*. On the other hand, another marker *–wa* is analyzed as a discourse topic which is posited under the CP field.

Arjuna who-who-ACC like-NEG
'Who didn't Arjuna like?'

b. yaar-yaar-ai ardʒuna virumba-villai? (wh>¬, *¬>wh)
who-who-ACC Arjuna like-NEG

Notice that wh-scrambling in (90)b moves to a higher position than the TP-domain, hence it is plausible to argue that it can be an instance of A'-movement. The claim that wh-scrambling can land at a higher position is further supported by adverb placement. Example (91)a shows that the wh-question can be preceded by a speaker-oriented adverb such as *nijamave* 'truly'. The sentence-initial position of speaker-oriented adverbs is compatible with the consensus that they are situated at the CP (Speech-act) domain (Cinque 1999). Example (91)b shows that the wh-word can be scrambled across the speaker-oriented adverb:

(91) a. Nijamave, ardʒuna yaar-ai virumba-villai?
truly Arjuna who-acc like-NEG
'Truly, who didn't Arjuna like?"

b. yaar-ai, nijamave, ardʒuna virumba-villai?
who-acc truly Arjuna like-NEG
'Who, truly, didn't Arjuna like?'

The aforementioned properties of wh-expressions can be fully observed in CM sluicing. Both single and group/distributive wh-expressions can be used as the wh-sluice:

(92) a. ardʒuna yaar-ai-o virumba-villai, aanal yaar-ai endru
Arjuna who-ACC-INDEF like-NEG but who-ACC that
teriya-villai.
know-NEG
'Arjuna did not like someone, but I don't know who.'

b. ardʒuna yaar-yaar-ai-o virumba-villai, aanal yaar-yaar-ai
Arjuna who-who-ACC-INDEF like-NEG but who-who- ACC
endru teriya-villai.
that know-NEG
'Arjuna did not like some people, but I don't know who.'

Moreover, it is possible that the wh-sluice linearly precedes the speech-act adverb in the sluiced clause:

(93) a. ardʒuna yaar-ai-o virumba-villai, aanal yaar-ai, nijamave endru
Arjuna who-ACC-INDEF like-NEG but who-ACC truly that
teriya-villai.
know-NEG

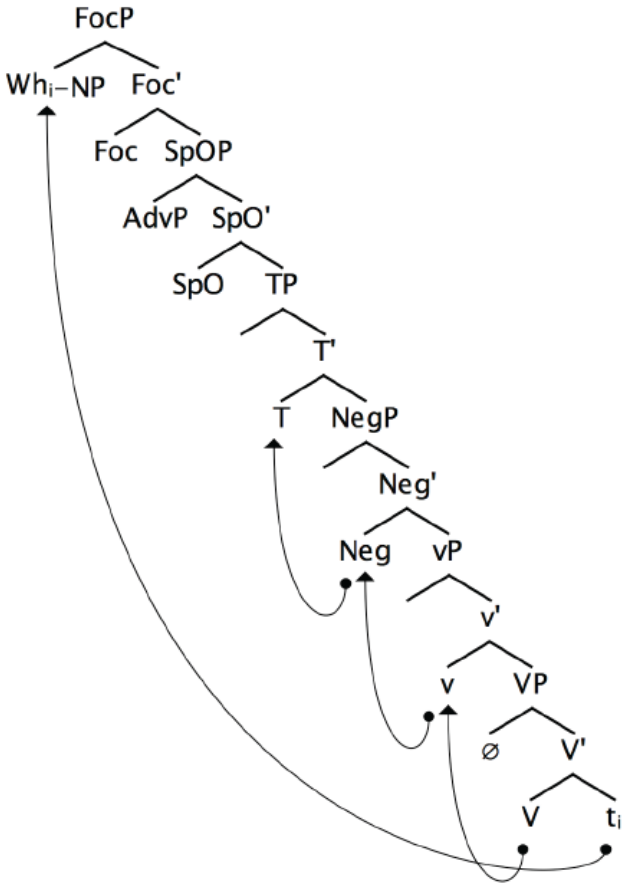
‘Arjuna did not like someone, but I don’t know who, truly.’

b. ardʒuna yaar-yaar-ai-o virumba-villai, aanal yaar-yaar-ai,
Arjuna who-who-ACC-INDEF like-NEG but who-who-ACC
nijamave endru teriya-villai.
truly that know-NEG
‘Arjuna did not like some people, but I don’t know who, truly.’

(94) A: ardʒuna yaar-ai-o/yaar-yaar-ai-o paar-tt-aan.
Arjuna who-ACC-INDEF/who-who-ACC-INDEF see-PST-3SM
B: yaar-ai/yaar-yaar-ai, nijamava?
who/who-who-ACC truly
‘Who, truly?’

One plausible assumption based on these is to say that the scrambled wh-sluice is situated at the CP domain, e.g. focus phrase. The sluiced clause can be described by TP-domain deletion at the level of PF. To schematize (SpOP = ‘speaker-oriented phrase):

(95)



Multiple CM sluicing can be described by hypothesizing that the two CM wh-sluices undergo A'-movement to two focus phrases (derived by adjunction):[29]

(96) Yaar-o et-ai-o vaang-in-aan, aanal [$_{FocP}$ yaar$_i$ [$_{FocP}$ et-ai$_j$
s.o-INDEF sth-ACC-INDEF buy-PST-3SM but who$_i$ what-ACC
[$_{TP}$ t_i t_j vaang-in-aan]]] endru teriya-villai.
buy-PST-3SM that know-NEG

By contrast, while the in-situ approach to sluicing (Abe 2015) can also describe the scope-bearing capacity of the wh-sluice, it remains somewhat unclear how deletion applies so that the CM wh-sluice can be obtained at the PF. The scrambling approach to CM sluicing, on the other hand, easily describes the following case in which the order of the two wh-sluices is inverted:

(97) Yaar-o et-ai-o vaang-in-aan, aanal [$_{FocP}$ et-ai$_j$ [$_{FocP}$ yaar$_i$
s.o-INDEF sth-ACC-INDEF buy-PST-3SM but what-ACC who
[$_{TP}$ t_i t_j vaang-in-aan]]] endru teriya-villai.
buy-PST-3SM that know-NEG

The following claim regarding the type of operation NP- and wh-scrambling are involved in can be stated:[30]

(98) In Tamil, NP-scrambling is an instance of A-movement, whereas wh-scrambling is an instance of A'-movement.

8. Conclusion and some slight discussion about Dravidian syntax

In this paper we conduct a detailed analysis of the sluicing strategy in Tamil. Tamil allows two sluicing strategies, namely case-marked (CM) sluicing and non-case-marked (NCM) sluicing. The wh-sluice in CM sluicing is marked by the same grammatical case as its antecedent correlate, whereas the one in NCM sluicing does not bear the antecedent case. We have argued that the sluiced clauses in the two types of sluicing involve different underlying configurations. For CM sluicing, the sluiced clause is derived from a full-fledged interrogative CP at the underlying level. For NCM sluicing, the sluiced clause is derived from a biclausal structure containing a simple sentence followed by a fragment (i.e. null copular) question (Spad). The occurrence of a bare wh-sluice in both types of sluicing stems from different

[29] See also Manetta 2011 for a multiple specifier analysis of multiple wh-fronting constructions in Kashmiri and Hindi-Urdu.

[30] It may also be possible to state that wh-scrambling does not involve syntactic A'-movement, but phonological movement (Kidwai 1999; Erteschik-Shir and Strahov 2004), given that wh-scrambling does not seem to yield any grammatical effect. This is also the claim made by Annamalai (2003) who states that Tamil scrambling does not involve any syntactic movement. However the list of distinctions between NP- and wh-scrambling suggests that the stylistic movement approach should also be improved. We will leave this issue for further work.

operations. The wh-sluice in CM sluicing is the result of leftward scrambling to the CP-edge followed by TP-domain deletion at the level of PF (Merchant 2001). On the contrary, the wh-sluice in NCM sluicing and does not involve any movement operation. We also investigate the work on Tamil scrambling (Annamalai 2000, 2003; Sarma 2003) and argue that the traditional diagnostics of A/A'- movement do not apply smoothly to Tamil. However, considerations from scope reading, negation, adverb placement and multiple scrambling lead us to argue that that NP-scrambling is an instance A-movement, whereas wh-scrambling is an instance of A'-movement.

From a wider perspective, a full-fledged analysis of Tamil sluicing casts doubt on the grammatical analyzes of Dravidian languages as a single entity. Traditionally, Dravidianists focus on the comparative linguistic aspects of various Dravidian languages (including 26 major languages spoken by 200 million people in South Asia; Krishnamurti (2003)) from a historical vantage point. Even though it is currently world's fifth largest language family, the tradition of treating Dravidian languages as a single analytic entity remains in current generative literature (Amritavalli 2003, 2014; Amritavalli and Jayaseelan 2005; Jayaseelan and Amritavalli 2005; Subbārāo 2012; Balusu 2016).[31] However this universalist approach to Dravidian also alludes to the claim that any synchronic variation among branch languages is morpho-phonological (e.g. in terms of the strong/weak feature which drives different movement operations and word order), and that all branch languages should be couched in the same underlying principles and syntactic structure.[32] This situation often arises when Dravidianists (who are usually a native speaker of a major Dravidian language) make claims about Dravidian as a language family based on his/her intuition of a single language. While many claims about Dravidian remain valid and insightful, others should be taken with a grain of salt. For instance, Balusu (2016) proposes claims about the source of Dravidian sluicing using Telugu as the major evidence. However, some brief comparison between Tamil and Telugu sluicing immediately reveals that any work on Dravidian syntax should be brought to close scrutiny. Balusu claims that Dravidian (namely Telugu in this context) sluicing is similar to Japanese, both of which having a cleft source. This stems from his observation that the clefted pivot in Telugu can bear various grammatical case. Example (99)a,b show that the pivot Ravi bears accusative and dative case in Telugu, respectively. (99)c is a case of Telugu sluicing, showing that the case-marked wh-sluice can be preceded by a demonstrative *adi* 'that':

(99) a. Raamu koTT-in-di ravi-ni. [Telugu]

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[31] For instance in Subbārāo (2012: 33):

> "Dravidian languages are the most homogeneous set of languages in the subcontinent in having syntactic phenomena which exhibit very little *syntactic* variation.' (emphasis in original)

[32] This approach was practiced in Jayaseelan (2004) regarding the position of the wh-words in various Dravidian languages (and Tamil appears to be an 'exotic' language as the subject wh-word can appear at both SOV and OSV order).

Ramu hit-PST-CLM Ravi-ACC
'It is Ravi that Ramu hit.'

b. Raamu pustakam is-tun-di ravi-ki.
Ramu book give-CONT-CLM Ravi-DAT
'It is Ravi that Ramu is giving the book to.'

c. Raamu eed-oo konnaaDu, kaani adi eemiT-oo naa-ku tel-iyadu.
Ramu what-DISJ bought, but that what-DISJ I-DAT know-NEG
'Ramu bought something, but I don't know what.'

Moreover, Telugu allows multiple clefts and sluicing (100):

(100)a. raamu icc-in-di ravi-ki pustakam. [Telugu]
Ramu give-PST-CLM Ravi-DAT book
'It is a book to Ravi that Ramu gave.'

b. Raamu icc-in-di evari-ki eemiTi?
Ramu give-PST-CLM who-DAT what
'What is it to whom that Ramu gave?'

c. raamu evar-ik-oo eed-oo icceeDu, evar-ik-oo eed-oo naa-ku
Ramu who-DAT-DISJ what-DISJ gave, who-DAT-DISJ what- DISJ I- DAT
telusu.
know
'Ramu gave someone something, I know whom what.'

As our study clearly shows, none of the aforementioned properties of Telugu sluicing applies in Tamil. While it is true that Tamil and Telugu (and other Dravidian languages) possess similar syntactic and morphological strategies (e.g. right dislocation to express pragmatic effect, clefts formed by nominalized verbs, etc), the morpho-phonological variation can be very salient and systematic which leads us to reconsider whether a single linguistic system for Dravidian should be maintained. Detailed study of individual Dravidian languages (and the dialects of each branch language) is mandatory even though Dravidianists may sometimes find the discovery unsurprising.[33] However it is the limit of variation based on which solid linguistic theories of Dravidian syntax can be possibly drawn.[34] Dravidianists can consider the present work as a useful guideline for a full-fledged analysis of sluicing in many other

[33] For instance in Jayaseelan (2004, footnote 1):

> "I confine myself to Malayalam data in this paper, although what I say about Malayalam here is true of some other SOV languages of the South Asian region and elsewhere."

[34] The same path of linguistic analyses happens in other famous ancient languages such as Chinese and Arabic. Some recent works show that a solid linguistic theory with some scientific rigor can be attained if more cross-dialectal studies are conducted (Cheng and Sybesma 2005; Huang, Li, and Li 2009 for Chinese; Benmamoun 2000; Aoun, Benmamoun, and Choueiri 2010 for Arabic). The recent work by Amritavalli (2014) (which stems from Amritavalli and Jayaseelan (2005)) focusing on the negative clauses in various major Dravidian languages can be considered as a good attempt. For a wider perspective on how linguistic theory interacts with South Asian languages, please refer to Subbārāo (2012).

Dravidian languages, which potentially leads to an insightful parametric theory of sluicing in this partiucular language family.

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