Universal Concord as Syntactic Agreement

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1. Introduction

➢ Concord

- Concord and compositionality
  - ❑ Doubling phenomenon: there is more than one linguistic material on the surface, whereas these materials have the same semantic contribution
  - ❑ E.g. Negative Concord (NC)

(1) <u>Negative concord in Italian</u>   (Giannakidou & Zeijlstra 2017:7)
    *Gianni **non** ha   visto **niente**.*   (two negative expressions)
    Gianni not has seen   n-thing
    'Gianni hasn't seen anything.'   (one semantic negation)

  - ❑ Why does it matter? – the compositionality problem
  - ❑ Syntax-semantics mapping

- Concord among quantificational elements
  - ❑ Negation (Labov 1972, Haegeman & Zanuttini 1996, Zeijlstra 2004, *i.a.*)
  - ❑ Modals (Geurts and Huitink 2006, Zeijlstra 2008)
  - ❑ Focus (Simpson & Wu 2002, Narrog 2016, Erlewine 2017)
  - ❑ Restrictive quantifiers: Korean *man* "only" (Y. Lee 2005)
  - ❑ Existential quantifiers: German indefinite *irgendein* (Kratzer & Shimoyama 2002, Kratzer 2005)
  - ❑ Interrogative concord: multiple *wh*-questions (Kratzer 2005), *wh*-concord (Kinjo & Oseki 2016)
  - ❑ Universal quantifiers?[1]

- The nature of concord
  - ❑ **Semantic approach**: NC as NPI/indefinite licensing (Ladusaw 1992), absorption (De Swart & Sag 2002) or universal quantifiers scoping over negation (Giannakidou 2000)
  - ❑ **Syntactic approach**: NC as Syntactic agreement (e.g. Zeijlstra 2004, 2008)

➢ Universal verbal suffix *-can* in Cantonese

- Marks universal quantification (Tang 2015, P. Lee 2017)

(2) *Aaming jam-**can**   naai, go-tou   zau   tung.*
    Ming   drink-CAN   milk CL-stomach then   ache
    'Whenever Ming drank milk, his tummy felt odd.'

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[1] Dong (2009) and C. Tsai (2015) suggest that *mei … dou* "every … all" in Mandarin is an instance of UC. This suggestion however should be carefully considered. See the residue for discussion.

▫ Co-occurs with other universal quantifiers (UQs)

(3) *Aaming* **mui-ci** *jam-can naai, go-tou zau tung.*
Ming every-time drink-CAN milk CL-stomach then ache
'Every time Ming drank milk, his tummy felt odd.'

- Demonstrates locality conditions
  - ▫ Impenetrability
  - ▫ Intervention effects

➢ Goals
- To show that Cantonese verbal suffix *-can* is a universal concord (UC) element
- To argue for a syntactic agreement account for UC
  - ▫ *-can* is merely an agreement marker and is semantically vacuous
- To provide novel evidence from intervention effects for syntactic approach to concord

➢ Roadmap
- §2: *-Can* as a UC element
- §3: Proposal: syntactic agreement
- §4: Arguments from locality
- §5: Implications & residue

2. A paradigm of universal concord in Cantonese
➢ Working definition for universal concord:

(4) *Unviersal Concord:* Two or more universal elements yield one semantic universal quantification.
(Following Zeijlstra (2004)'s definition for NC)

➢ The data
- (i) *-can* marks universal quantification
  - ▫ Universal quantification over events/ situations (Tang 2015, P. Lee 2017)

(5) *Aaming jam-**can** naai, go-tou zau tung.*
Ming drink-CAN milk CL-stomach then ache
'Whenever Ming drank milk, his tummy felt odd.'

(6) $\forall e$ [DRINK(milk)(Ming)(e) → $\exists e'$[ACHE(Ming's stomach)(e')]]
(for every event e such that e is a milk-drinking event of Ming, there is an event e' such that e' is an ache event of Ming's stomach (i.e. a stomachache event of Ming))

▫ Incompatible with existential event quantifier *jau jat-ci* 'there is once …'

(7) *Aaming **jau jat-ci** jam-zo naai, go-tou zau tung.*
Ming have one-time drink-PFV milk CL-stomach then ache
'There was once that Ming drank milk and his tummy felt odd.'

(8) **Aaming **jau jat-ci** jam-**can** naai, go-tou zau tung.*
Ming have one-time drink-CAN milk CL-stomach then ache

      ▫   Universal quantification over individuals

      ▫   Also incompatible with existential quantifier *jau go* 'have one'

(9) [[$_{RC}$ *Aaming heoi-can* t$_i$] *ge*   *gwokgaa$_i$*] *dou hou*   *lyun*.
     Ming   go-CAN   MOD country all   very   chaotic
  'Every country Ming visited is in chaos.'

(10) ∀x [[COUNTRY(x) ∧ VISIT(x)(Ming)] → CHAOTIC(x)]
    (For every *x* such that *x* is a country and Ming visited *x*, *x* is chaotic.)

- (ii) *-can* may co-occur with other universal quantifiers

(11) a. *Aaming* **mui-ci**   *jam-**can***   *naai, go-tou*   *zau*   *tung*.   (cf.(5))
     Ming   every-time drink-CAN milk CL-stomach then   ache
     'Every time Ming drank milk, his tummy felt odd.'   (one universal quantification)

     b. **Zijiu** *Aaming jam-**can***   *naai, go-tou*   *zau tung*.   (cf.(5))
     only.if Ming   drink-CAN milk   CL-stomach then ache
     'Whenever Ming drinks milk, his tummy will feel odd.'   (one universal quantification)

(12) [**Mui-go** [$_{RC}$ *Aaming heoi-**can*** t$_i$] *ge*   *gwokgaa$_i$*] *dou hou*   *lyun*.   (cf.(9))
    every-CL Ming go-CAN   MOD country   all   very   chaotic
    'Every country Ming visited is in chaos.'   (one universal quantification)

➢   Comparing *-can* with other UQs

- Both share (i) – marking universal quantification
    ▫   BUT: UQs are selective in terms of semantic types, while *-can* is unselective
       i.e. **mui-ci** "every time" and **zijiu** "whenever" for events, **mui-go** "every-CL" for individuals

- Differ in (ii) - UQs targeting on the same restrictor / nuclear scope cannot co-occur
    ▫   **mui-ci** "every time" vs. **zijiu** "whenever"

(13) *****Zijiu**   *Aaming* **mui-ci**   *jam naai, go-tou*   *zau tung*.
    only.if Ming   every.time drink milk CL-stomach then ache
    Int.: 'Every time Ming drank milk, his tummy felt odd.'

(14) a. *[$_{CP}$ UQ$_{<v>}$ … UQ$_{<v>}$]   b. ^{OK}[$_{CP}$ UQ$_{<v>}$ … *-can*]

    ▫   **mui-go** "every-CL" vs. **mui-ci** "every time" / **zijiu** "whenever"

(15) ***[**Mui-go** [$_{RC}$ *Aaming* **mui-ci**   *heoi* t$_i$] *ge*   *gwokgaa$_i$*] *dou hou*   *lyun*.
    every-CL Ming every-time go   MOD country   all   very   chaotic
    Int.: 'Every country Ming visited is in chaos.'

(16) a. *[$_{DP}$ UQ$_{<e>}$ [$_{RC}$ … UQ$_{<v>}$] …]   b. ^{OK}[$_{DP}$ UQ$_{<e>}$ [$_{RC}$ … *-can*] …]

➢   *-Can* is a UC element:

(17) <u>Generalization on universal concord of *-can*</u>
    a. **Obligatoriness**: whenever *-can* occurs, the sentence must have one universal quantification, regardless of whether other overt UQ is present.
    b. **Redundancy**: only one universal quantification in sentences containing both *-can* and another UQ.

    ▫   (17a) → -can is a universal element (in the sense that it is linked to universal reading)
       (17b) → -can together with other universal elements with yield one universal quantification
       =(4) working definition for UC, thus *-can* is regarded as UC

3. Universal concord as syntactic agreement

➢   The proposal

(18)
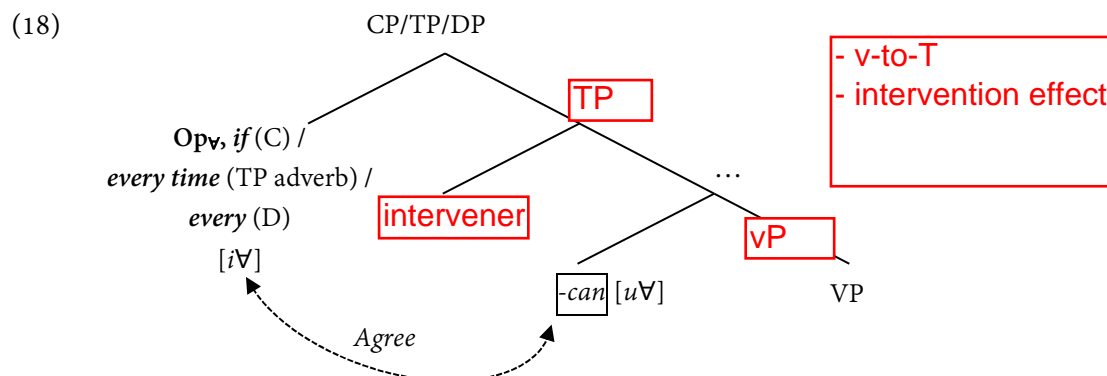
- Three components:

- (i) *-Can* is a *concord* element (i.e. agreement marker) carrying an *uninterpretable universal feature* [$u\forall$], instead of a true UQ. Since [$u\forall$] is uninterpretable, *-can* is semantically vacuous and cannot be mapped onto a logical universal quantifier in LF.
  → accounts for (17b) redundancy

- (ii) A true UQ carries an *interpretable universal feature* [$i\forall$] and is mapped onto a logical universal quantifier in LF. The [$i\forall$] must establish Agree relation with [$u\forall$] on *-can* and delete the [$u\forall$] for the interface to interpret.
  → accounts for (17a) obligatoriness
  - □   Also assume that Agree may go *upward*, i.e. the Probe is c-commanded by the Goal (Wurmbrand 2011, Zeijlstra 2012, Bjorkman & Zeijlstra 2019, *i.a.*).[2]

- (iii) CP domain may have a sentential covert necessity operator.

➢   An argument for (i): uninterpretable universal feature ([u∀])

- 'Almost' test
  - □   *Caa-m-do* 'almost' can only be followed by quantificational elements.

(19) *keoi* [PP *tung* [**caa-m-do** *gogo   jan/   ＊keoidei*]] *dou   king-dou   gai.*
　　 3SG　　 with   almost   every   person   they   all   talk-able   chat
　　 'He can chat with almost everyone/＊them.'

  - □   *Caa-m-do* 'almost' can be followed by genuine UQ *mui-ci* "every time", but not by *-can*. Hence, *-can* carries no quantificational force. This supports the uninterpretability of the universal feature on *-can*.[3]

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[3] One may question whether 'almost' can be licensed within -can-clauses, preceding Op∀ (=a below). The answer is not. This is independently ruled out by the fact that *caa-m-do* 'almost' is an adverb at TP/AspP (Tang 2009), lower than the Op∀ at CP (=b).
a.   *Hypothetical configuration:*
　　 ＊[CP [TP   *keoi   **caa-m-do**   Op∀   daa-can   gei* …   (embedded 'almost')
　　　　　 3SG   almost   　　 play-CAN   video.game
b.   ＊[CP **Op∀** [TP   *keoi   **caa-m-do**   daa-can   gei* …   (embedded 'almost')
　　　　　 3SG   almost   　　 play-CAN   video.game

(20) a. [*keoi* **caa-m-do** *mui-ci   daa gei*]   *ne, aamaa dou wui faatnau*
　　　3SG almost   every-time play video.game TOP mum   all   will become.mad
　　　'Almost every time he played video games, his mum got angry.'

　　b. *[*keoi* **caa-m-do** *daa-*can *gei*]   *ne, aamaa dou wui faatnau*
　　　3SG almost   play-CAN video.game TOP mum   all   will become.mad

(21) a. [*keoi* **caa-m-do** *mui-ci   daa-*can *gei*]   *ne, aamaa dou wui faatnau*
　　　3SG almost   every-time play-CAN video.game TOP mum   all   will become.mad
　　　'Almost every time he played video games, his mum got angry.'

　　b. *[*keoi   mui-ci*   **caa-m-do** *daa-*can *gei*]   *ne, aamaa dou wui faatnau*
　　　3SG   every-time almost   play-CAN video.game TOP mum   all   will become.mad

➢　　Arguments for (iii): covert necessity operator (Op∀)

 • 　Independently motivated by donkey sentences (bare conditionals) in Chinese

　　□　*Wh*-nominals in Chinese bear no inherent quantificational force (Aoun & Li 1993, Tsai 1994,
　　　1999, Cheng 1994). They co-vary and are bound by a same operator, ∀x.

(22) **Shei** *xian lai,*   **shei** *xian chi*   (Mandarin, Cheng & Huang 1996:127)
　　who   first come who first eat
　　'If *x* comes first, *x* eats first.'

(23) ∀x (x comes first → x eats first)

 • 　Presence of Op∀ in -*can*-clauses: 'almost' test

　　□　-*Can*-clause follows *caa-m-do* legitimately, showing that the clause carries quantificational force.
　　　The force can only come from a covert Op∀.

(24) **Caa-m-do** *ne,* [Op∀ *keoi ceot-*can *gaai*]*zau wui dit   cin*   (matrix 'almost')
　　almost   TOP   3SG go-CAN   out then will fall money
　　'It is almost the case that every time he went out, he lost money.'

 • 　Presence of Op∀ in -*can*-clauses: aspectual verb raising test

　　□　*Hoici* 'begin' can be raised across a subject iff the subject is quantificational (T. Lee 2019a,b; also
　　　see Szabolcsi 2009 for a similar use of 'begin' in Hungarian)

(25) **Hoici**　[*cyunbou jan   dou*/**Aaming [t *haau-dou hou   singzik*]]   (T. Lee 2019a:3)
　　begin   every   person all Ming   get-able good   result
　　'It begins to be the case that everybody/*Ming is getting good results.'

　　□　The -*can*-clause licenses the raising of *hoici* in (26), suggesting a quantificational nature of the -
　　　can-clause. This can only be attributed to a covert Op∀.

(26) **Hoici**　[[Op∀*keoi daa-*can *gei*]   [*aamaa* [t *zau wui faatnau*   ]]]
　　begin   3SG play-CAN video.game mum   then will become.mad
　　'It begins to be the case that every time he played video games, his mum got angry.'
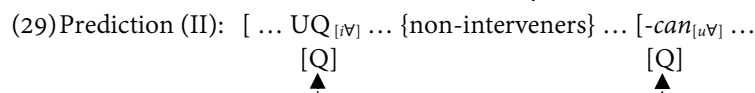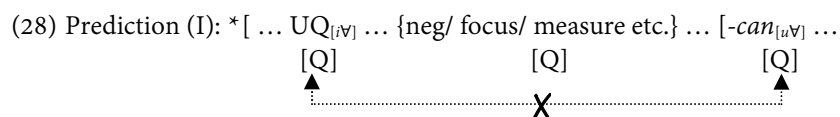
4. Locality in universal concord (i.e. arguments for (ii))

➢ Intervention effects (IEs)

- Agree relation, as a syntactic dependency, is subject to intervention locality.
  - Here I adopt Rizzi's (2001, 2004) feature-based Relativized Minimality (RM) to formulate intervention.
  - A set of quantificational elements carrying a superfeature [Q]:
    Quantificational: *wh*, neg, measure, focus … [Q]
    (Note: *measure* refers to frequency adverbs like 'often')
  - A relation formed by two Q-elements X and Y is not in a minimal configuration if there is a Z such that Z carries [Q] and Z intervenes between X and Y (i.e. commands Y but not X). → IEs

(27) X … Z … Y
  [Q] … [Q] … [Q]
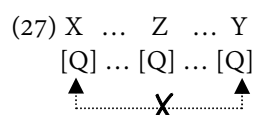
  - The [u∀] on *-can* agrees with [i∀] on UQs. Assume that [∀] is a quantificational feature under the superfeature [Q]. The Agree relation of *-can* is predicted to be disrupted by intervening [Q] elements (e.g. negation, focus), but to survive with non-[Q] elements.

(28) Prediction (I): *[… UQ$_{[i∀]}$ … {neg/ focus/ measure etc.} … [*-can*$_{[u∀]}$ …
    [Q]   [Q]   [Q]

(29) Prediction (II): [… UQ$_{[i∀]}$ … {non-interveners} … [*-can*$_{[u∀]}$ …
    [Q]   [Q]

- [Q] interveners in Chinese
  - [Q] elements act as an intervener to *why*-questions and A-not-A questions, both arguably involve operator movement or agreement with a question operator (Huang 1982a, 1991, Aoun & Li 1993).
  - Interveners: [Q] quantificational elements
    1. Existential and universal quantifiers, e.g. "everyone" (for Cantonese see Law 2001; for Mandarin see Wu 1997)
    2. Negation "not" (Soh 2005)
    3. Adverbs of quantification, e.g. "often" (for Cantonese see Law 2001; for Mandarin see Soh 2005)
    4. Modals, e.g. "must" (Tsai & Yang 2015)
    5. Focus operators, e.g. "only" (Soh 2005)
    6. *Why*-adverbial (for A-not-A questions)
  - Non-interveners: non-quantificational elements
    1. Locatives, e.g. "on the subway" (Ernst 1994)
    2. Temporals, e.g. "today" (Ernst 1994)
    3. *Wh*-nominals, e.g. "who" (Huang 1982b)

- Intervention effects on *-can*
  - [Q] elements → prediction (I) is borne out

(30) Quantifiers

[*Zijiu* **jau jan** *man*(*-can)*je*] *keoi zau baan fan.*
only.if have person ask-CAN stuff 3SG then pretend sleep
'If someone asks him for something, he will pretend to be asleep.'

(31) Negation

Keoi [*mui-ci* **mou** *daai*(*-can) *syu*] *dou wui bei jan naau.* [4]
3SG every-time not.have bring-CAN book all will get person scold
'Every time he hadn't brought the book, he got scolded.'

(32) Adverbs of quantification

[*Mui-go* [$_{RC}$ *Aaming gingsoeng heoi*(*-can) t$_i$] *ge gwokgaa$_i$*] *dou hou lyun.*
every-CL Ming often go-CAN MOD country all very chaotic
'Every country Ming has often visited is in chaos.'

(33) Modals `*jinggoi-can`

Keoi [*mui-ci* **jinggoi** *heoi zou*(*-can) *je go-zan*] *zau mou-zo jing.*
3SG every-time should go do-CAN stuff that-moment then not.have-PFV shadow
'Every time when he should go to work, he disappears.'

(34) Focus operators

[*mui-ci* **dak** *keoi jung*(*-can)*gaan-fong go-zan*] *dou hou zing.*
every-time only 3SG use-CAN CL-room that-moment all very quiet
'Every time that he was the only person who was using the room, the room was quiet.'

(35) *Why*-adverbial

*[*Zijiu keoi* **dimgaai** *fan*(-can) *gaau*] *lousi zau wui naau*?
only.if 3SG why sleep-CAN nap teacher then will scold
Int.: 'For which reason x such that the teacher will scold at him if he sleeps for x?'

(← But *why* cannot occur in adjunct islands in the first place. Since the ungrammaticality can be explained otherwise, this test is simply not applicable.)

  □ Non-[Q] elements → prediction (II) is borne out

(36) Locatives

[*Mui-ci* **hai deitit-dou** *king*(-can) *dinwaa*] *dou bei jan naau.*
every-time at subway-LOC talk-CAN telephone all get person scold
'Every time (I) had a call on the subway, I got scolded.'

(37) Temporals

[*Zijiu* **ziuzou** *jam*(-can) *naai*] *zau touting.*
only.if morning drink-CAN milk then stomachache
'Once (I) drinks milk in the morning, my tummy will feel odd.'

(38) *Wh*-nominals

  a. [*Zijiu* **bingo** *fan*(-can) *gaau*] *lousi zau wui naau*? (interrogative *wh*)
    only.if who sleep-CAN nap teacher then will scold
    'Who is the person that teacher will scold at him if he sleeps?'
  b. [*mouleon* **bingo** *lai*(-can)] *keoi dou naau.* (universal *wh*)
    no.matter who come-CAN 3SG all scold
    'He scolds at whoever comes.'

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[4] *Cf.*: lexical negation *m-gin* "lose, (lit.) not-see". Here, the negation is on the lexical level but not on the syntactic level, which can be seen from its inability to license NPI. Hence, the negation is located below *-can* and no intervention effects are triggered.

c. **keoi m-gin jamho je.*
   3SG NEG-see any thing   Int.: "He loses anything."
d. [*Keoi* **mui-ci** *m-gin-can je*], *dou haam-dou catcoi.*
   3SG every-time NEG-see-CAN thing all cry-RESULT colorful
   "Every time he loses something, he will wail as hard as he can."

(39) <u>Intervention effects in universal concord</u>

(Non-)interveners	Occurring in between UQ and *-can*	Examples
Quantifiers	*	(30)
Negation	*	(31)
Adverbs of quantification	*	(32)
Modals	*	(33)
Focus operators	*	(34)
Why-adverbial	(Not applicable)	(35)
Locatives	OK	(36)
Temporals	OK	(37)
Wh-nominals	OK	(38)

- IEs have not been extensively discussed in the literature of concord.
  - Rare exception: NC in West Flemish (Haegeman & Lohndal 2010)
  - Only negative quantifiers and universal quantifiers are discussed.
- BUT some of the IEs are also found in semantic NPI licensing (Haegeman & Zanuttini 1996, Guerzoni 2006)
- It is important that IEs must be examined exhaustively for a syntactic approach to concord. Under RM, any of the [Q] elements would act as an intervener to a syntactic [Q] dependency. That is, there must be no exceptions.
  - For semantic NPI licensing, exceptions could be found.
  - The necessity modal *jinggoi* "should" in Cantonese, although is a [Q] element (evidenced by its IEs on why-questions and A-not-A question), does not induce any IE to the NPI *jamho* "any".

(40) a. *Keoi* <u>*jinggoi*</u> **dimgaai** *sik* *zinzaa-je*?   (*why*-question)
    3SG should why   eat fried-food
    Int.: 'For which reason x, such that he should eat fried food for x?'
    b. *Keoi* <u>*jinggoi*</u> **sik-m-sik**   *zinzaa-je*?   (A-not-A question)
    3SG   should eat-not-eat   fried-food
    Int.: 'should he eat junk food?'

(41) *Ngo* *(**m-**)*gokdak* [*keoi* <u>*jinggoi*</u> *sik* | *jamho* | *zinzaa-je*]   (RM violation)
    1SG NEG-think 3SG   should eat   any   fried-food
    'I don't think he should eat any junk food.'

  - However, as we have seen in (33), *jinggoi* "should" does induce IEs on *-can*. This contrast favors a syntactic agreement approach over a semantic licensing approach to *-can*.
  - This contrast also imposes a challenge for Sio (2019)'s proposal that *-can* is a free choice item whose event variable is bound by an iota operator or a necessity operator.

➢ Impenetrability
- I adopt the view that Agree relation is subject to phase impenetrability condition (PIC).

(42) [$_{ZP}$ Z … [$_{XP}$ X … [$_{HP}$ α [H YP]]]]; where Z and H are phasal heads
    a. PIC1 (Chomsky 2000) dictates that YP is not visible to operations in both XP and ZP
    b. PIC2 (Chomsky 2001) dictates that YP is visible to operations in XP, but not in ZP

- Negative concord obeys PIC2
  - NC is clause-bounded (Zeijlstra 2004, 2008). Assuming that CP and vP are both phases, there are three phasal boundaries between the matrix negation and the embedded n-word in (42). The locality effect could easily be captured by either PIC1 or PIC2.

(43) *$Gianni$ **non** ha [$_{v}$P $detto$ [$_{CP}$ che a [$_{v}$P $achato(?)$ **$niente$**]]]   [Italian]
    Gianni NEG has said that has bought n-thing
    'John didn't say that he bought anything'   (adapted from Zeijlstra 2008:43)

  - Subjunctive clauses may allow NC. But as suggested by Zeijlstra (2008) citing Quer (1998) and Giorgi (2004), they only induce weak locality effects.

(44) **$Dudo$** [$_{subjunctive}$ que $vayan$ [$_{v}$P a $encontar$ **$nada$**]]   [Spanish]
    Doubt.1SG that will.3PL.SUBJ find n-thing
    'I doubt they will find anything'   (adapted from Zeijlstra 2008:43)

  - In Phase theory, subjunctive clauses may be regarded as non-phases or weak phases. But even if the clause boundary is not a phase, the embedded vP is still a phase. That is, the matrix negation (induced by "doubt") and the embedded n-word is separated by a phase boundary. By PIC1, the n-word is not visible to "doubt" (in matrix VP), whereas by PIC2, it is visible to "doubt".
  - This suggests that NC obeys PIC2 instead of PIC1.

- The Agree relation between -can and UQs obeys PIC2
  - Assume $-can$ is higher than vP.[5]

(45) *Ngo **mui-$ci_{[i\forall]}$** [$_{v}$P $gong$ [$_{CP}$ waa $keoi$ $king$-$can_{[u\forall]}$ gai], $keoi$ zau $sauseng$
                           *Agree
    1SG every.time say COMP 3SG talk-CAN chat 3SG then shut.up
    Int.: 'Every time I said that he had a chat, he became silent.'

(46) Ngo **mui-$ci_{[i\forall]}$** [$_{v}$P bik $keoi$ [$_{TP}$ $king$-$can_{[u\forall]}$ gai], $keoi$ zau $sauseng$[6]
                     Agree
    1SG every.time force 3SG talk-CAN chat 3SG then shut.up
    'Every time I forced him to talk (with me), he became silent.'

> get-passive
> every time bei [TP beat-can]

(47) [**Mui-$go_{[i\forall]}$** [$_{CP=RC}$ $Aaming$ $heoi$-$can_{[u\forall]}$ t_i] ge $gwokgaa_i$] dou hou $lyun$
                 Agree
    every-CL Ming go-CAN MOD country all very chaotic
    'Every country Ming visited is in chaos.'

(48) ^{OK}$UQ_{[i\forall]}$ [$_{phase1(vP/CP)}$ … [$-can_{[u\forall]}$ …   ((46)b and (47))
          Agree

(49) *$UQ_{[i\forall]}$ [$_{phase2(vP)}$ … [$_{phase1(CP)}$ … [$-can_{[u\forall]}$ …   ((46)a)
          *Agree

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[5] This may be supported by the fact that no vP adverbials (e.g. "intentionally", "loudly") may co-occur with V-can. This could be interpreted as blockage of head movement of the verb to a projection outside vP (i.e. -can). This assumption is also consistent with Tang (2003)'s proposal that the syntactic position of quantificational affixes in Cantonese is higher than AspP, which is often assumed to be an extended projection of vP.

[6] One may question why the embedded control clause is TP instead of CP, which is a phase. Here, I follow Huang (2017) that the verb "force" in Chinese ($poshi$ in Mandarin, bik in Cantonese) take a non-phasal tenseless complement, evidenced by experiential lowering, failure of $lian$-preposing and internal topicalization within the complement, and lack of embedded tense and modals. The crucial point here is that the complement of "force" is not a phase.

- Semantic NPI licensing of *jamho* "any" does not respect PIC2

(50) *Ngo *(*m-*)zungji* [DP [CP *jamho* *zokgaa* *se*] *ge* *syu*]   (PIC2 violation)
  1SG   NEG-like   any   writer   write MOD book
  'I don't like books wrote by any writer.'

  □ The contrast between (45) and (50) supports a syntactic agreement approach to *-can.*

5. Concluding remarks

➢ Implications

- Universal concord is attested in Cantonese. The empirical gap is now filled.

- A new type of evidence, *intervention effects*, is offered to the syntactic agreement approach on concord.
  - □ Note that although IEs may also found in semantic NPI licensing, this argument is still valid for UC in Cantonese since (i) the set of interveners is independently motivated by other syntactic dependencies and (ii) the IEs are exhaustive in the sense that there is no exception, in contrast with semantic NPI licensing.
  - □ An extensive examination of IEs in other types of concord is needed.

- *-Can* agrees *upward*, which is an additional evidence to support *Upward Agree* (Zeijlstra 2012).

- Not only nominal domains but also *verbal domains* may have concord elements. Reconsideration can be made towards proposed A-quantifiers.

➢ Residue

- *Mei(ge) … dou* "every … all" in Mandarin
  - □ When *mei* "every" occurs in subject or topic DPs, adverb *dou* "all" is obligatory.

(51) **Meige** *ren* *(**dou**) *mai-le* *shu.*
  Every man all   buy-Asp book
  'Everyone bought a book.'   (Lin 1998:219)

  □ Kratzer (2005) cites this example to show that the source of distributivity may come from an adverbial operator *dou* "all", but not the modifiers *mei* "every" in DPs. But she has been silent on whether this example qualifies as UC.
  □ Dong (2009), C. Tsai (2015) regard *mei … dou* as universal concord
  □ However, Dong (2009) explicitly states that *mei* does have quantification force, which is not the case for *-can.*
  □ Furthermore, postverbal *mei* in object DPs does not require the presence of *dou*. There are even examples that pre-verbal *mei* occurs without *dou* (data from Google search by Li 2014:223).

(52) *Shanghai   quan-jing-tu,   keyi kandao **mei-ge**   xijie*   (post-verbal *mei* in object DPs)
  Shanghai whole-scene-map can see   every-CL detail
  'On the Shanghai full-scene map, one can see every detail.'

(53) *Ba **mei-ge**   xijie diaozhuo cheng   yishu*   (pre-verbal *mei* in PPs)
  BA every-CL detail carve   become art
  'carve every detail to make an art.'

  □ Whether *mei … dou* could be regarded as UC and analyzed as syntactic agreement should be carefully considered and requires further studies.

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