The Linguistic Society of Hong Kong
Annual Research Forum 2021

Abstract Handbook

Saturday, 4 December 2021

Yeung Kin Man
Academic Building
City University of Hong Kong

Hosted and co-sponsored by
Department of Linguistics & Translation,
City University of Hong Kong
Organizing Committee
(in alphabetical order of the last name)

Andy Chin
Winnie Chor
Regine Lai
Lau Chaak Ming
Peppina Lee
Margaret Lei
Li Bin
Felix Sze
# Table of Contents

<table>
<thead>
<tr>
<th>The LSHK Outstanding Thesis Award (MPhil category)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal fronting and focus in Igbo</td>
</tr>
<tr>
<td>Ezeamuzie Onyinyechukwu Rhoda</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 1A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntax 1</td>
</tr>
<tr>
<td>Head dependencies across coordination and subordination</td>
</tr>
<tr>
<td>Tommy Tsz-Ming Lee</td>
</tr>
<tr>
<td>On the Root Phenomena of AttitudeP: Evidence from Ne in Chinese</td>
</tr>
<tr>
<td>Sze-Wing Tang</td>
</tr>
<tr>
<td>Two kinds of resumption in Cantonese</td>
</tr>
<tr>
<td>Ka-Fai Yip</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 1B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linguistics and Education</td>
</tr>
<tr>
<td>需要類動詞的教學資源建設</td>
</tr>
<tr>
<td>Shan Wang and Lei Tang</td>
</tr>
<tr>
<td>以電子語料庫設計香港中學生古字學習範圍</td>
</tr>
<tr>
<td>Wing Sing Chiu</td>
</tr>
<tr>
<td>Glossaries in Chinese almanacs</td>
</tr>
<tr>
<td>Michelle Li</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 1C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociolinguistics</td>
</tr>
<tr>
<td>“Net Up Mud?” — Orthographic Strategies in Non-standardized Romanization of HK-Cantonese (&quot;Martian Code 火星文&quot;)</td>
</tr>
<tr>
<td>Michelle Man-Long Pang and Sharon Tsol-Lam Lee</td>
</tr>
<tr>
<td>Abbreviations and Trisyllabic Terms in Chinese — The case of “會” and “隊”</td>
</tr>
<tr>
<td>Ka Lai Mak</td>
</tr>
<tr>
<td>Intracommunity cohesion and intercultural adaptation: metaphor translation of CPC’s anniversary discourse</td>
</tr>
<tr>
<td>Qijun Song</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 2A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dialectology and Sino-Tibetan languages</td>
</tr>
<tr>
<td>Towards an OT model of differential object marking in Nubri</td>
</tr>
<tr>
<td>Cathryn Donohue</td>
</tr>
<tr>
<td>Egophoric Marking in Golog Tibetan</td>
</tr>
<tr>
<td>Jiahong Wang and Lawrence Yam-Leung Cheung</td>
</tr>
<tr>
<td>Cross-generational Changes in the Lexicon of Chongqinghua Native Speakers</td>
</tr>
<tr>
<td>Yijun Shi</td>
</tr>
<tr>
<td>Revisiting the three-way phonological contrast of stop consonants in Wuxi Wu Chinese</td>
</tr>
<tr>
<td>Ruofan Wu and Wai-Sum Lee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 2B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language acquisition</td>
</tr>
<tr>
<td>The Neutral Tone in Child Mandarin: Conflicting Experimental Findings and Contrasting Conceptions</td>
</tr>
<tr>
<td>Xiaohui Hu and Thomas Hun-tak Lee</td>
</tr>
<tr>
<td>The Acquisition of Cantonese Phonotactics</td>
</tr>
<tr>
<td>Regine Lai and Kin Man Carmen Tang</td>
</tr>
<tr>
<td>Infants’ Learning Bias in Vowel Harmony: Opaque and Transparent Vowels</td>
</tr>
<tr>
<td>Rena Yip and Regine Lai</td>
</tr>
<tr>
<td>Yuzhe Meng, Si Chen and Xi Chen</td>
</tr>
</tbody>
</table>

ii
### Session 2C

**Syntax 2**

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A constructional approach to Cantonese Ditransitives</td>
<td>Suet Ying Lam</td>
<td>19</td>
</tr>
<tr>
<td>The Cantonese ne1 Revisited: A Syntactic and Semantic Study on the Sentence-Initial Particle</td>
<td>Ka-Wing Chan</td>
<td>20</td>
</tr>
<tr>
<td>Free Relative Clauses in Cantonese</td>
<td>May Pik Yu Chan</td>
<td>21</td>
</tr>
<tr>
<td>Cantonese Relative Clause Processing</td>
<td>Kin Man Carmen Tang</td>
<td>22</td>
</tr>
</tbody>
</table>

### Session 3A

**Semantics and interface**

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>香港粵語疑問和陳述語氣之聲學初步探 —— 疑問詞、否定極項、句末助詞和句末語調</td>
<td>Ling Zhang and Yik Yiu Fung</td>
<td>23</td>
</tr>
<tr>
<td>Quantification of Chinese henduo and henshao: An implication on the role of morpho-syntactic diversification in natural language quantification</td>
<td>Yueming Sun</td>
<td>24</td>
</tr>
<tr>
<td>Epistemic and evidential modal construction mai6…Io1 in Cantonese: a case of modal strengthening and weakening</td>
<td>Peppina Po-Lun Lee</td>
<td>25</td>
</tr>
</tbody>
</table>

### Session 3B

**Bilingualism**

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of Noun-Modifying Clause Constructions in Heritage Mandarin</td>
<td>Mengyao Shang, Ziyin Mai, Stephen Matthews and Virginia Yip</td>
<td>27</td>
</tr>
<tr>
<td>Object omission in heritage bilingual children’s language: A case study of Luna’s speech patterns in CHCC</td>
<td>Yiling Hong</td>
<td>29</td>
</tr>
<tr>
<td>Filipino Children’s Acquisition of English and Filipino Cardinal Number Words: Exploring the Relationship between Code-switching, Number Value, and Mathematical Achievement</td>
<td>Carleon Mendoza and Virginia Yip</td>
<td>30</td>
</tr>
</tbody>
</table>

### Session 3C

**Socio-phonetics**

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Use of Tone and Tonal Combination in Brand Names</td>
<td>Yoyo Pui Yiu Tsang, Jialin Zhang and Mingxing Li</td>
<td>31</td>
</tr>
<tr>
<td>Vowel space warped in speaking through facial masks</td>
<td>Ting Zhang, Mosi He and Bin Li</td>
<td>32</td>
</tr>
<tr>
<td>The acoustic characteristics and perceived sexual orientation of Cantonese gay speech</td>
<td>Kwok Chung Lau</td>
<td>33</td>
</tr>
</tbody>
</table>
### Lecture Theatres at 4/F University Concourse, Yeung Kin Man Academic Building

<table>
<thead>
<tr>
<th>LT-1</th>
<th>Tim Ka Ping Lecture Theatre 田家炳演講廳</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT-2</td>
<td>Mr and Mrs Sun Chi Ching Lecture Theatre 孫子清伉儷演講廳</td>
</tr>
<tr>
<td>LT-3</td>
<td>CY Sun Lecture Theatre 孫建業演講廳</td>
</tr>
<tr>
<td>LT-4</td>
<td>Mr &amp; Mrs David T F Chow Lecture Theatre 郭顯庭伉儷演講廳</td>
</tr>
<tr>
<td>LT-5</td>
<td>Mr and Mrs Lau Tat Chun Lecture Theatre 劉振泉伉儷演講廳</td>
</tr>
<tr>
<td>LT-6</td>
<td>Chan Kei Bis Lecture Theatre 陳其錦演講廳</td>
</tr>
<tr>
<td>LT-7</td>
<td>Lily Ching Lecture Theatre 韋麗靜演講廳</td>
</tr>
<tr>
<td>LT-8</td>
<td>F.A.M. Lecture Theatre 富兆民演講廳</td>
</tr>
<tr>
<td>LT-9</td>
<td>SAE Magnetics Lecture Theatre 新科實業演講廳</td>
</tr>
<tr>
<td>LT-10</td>
<td>Peter Ho Lecture Theatre 何振輝演講廳</td>
</tr>
<tr>
<td>LT-11</td>
<td>John Chan Lecture Theatre 陳振東演講廳</td>
</tr>
<tr>
<td>LT-12</td>
<td>Mr &amp; Mrs Ho Chun Hung Lecture Theatre 何振雄伉儷演講廳</td>
</tr>
<tr>
<td>LT-13</td>
<td>Jennifer and Haywood Cheung Lecture Theatre 劉陳家仁伉儷演講廳</td>
</tr>
<tr>
<td>LT-14</td>
<td>Leung Ka Yik Tai Lecture Theatre 劉家一父子演講廳</td>
</tr>
<tr>
<td>LT-15</td>
<td>CMA Lecture Theatre 香港中華廠商聯合會演講廳</td>
</tr>
<tr>
<td>LT-16</td>
<td>Benjamin Kwok Lecture Theatre 郭本傑演講廳</td>
</tr>
<tr>
<td>LT-17</td>
<td>Wong To Yick Tong Lecture Theatre 黃德元堂演講廳</td>
</tr>
<tr>
<td>LT-18</td>
<td>Mr &amp; Mrs Chan Hon Pun Lecture Theatre 陳振邦伉儷演講廳</td>
</tr>
<tr>
<td>LT-19</td>
<td>Ariel Wang Classroom 汪宜樺課室</td>
</tr>
<tr>
<td>LT-20</td>
<td>Kenneth Lo Classroom 魯凱恩課室</td>
</tr>
<tr>
<td>LT-21</td>
<td>Chu Wai Tong Fung Classroom 車偉東芳課室</td>
</tr>
<tr>
<td>LT-22</td>
<td>P4701 B4701, G4702, G4701, Y4702, P4702, Y4702 and P4701 Classrooms 講堂</td>
</tr>
</tbody>
</table>

---

**Campus Map**

- **To MTR Kowloon Tong Station**
- **To Shek Kip Mei**
- **To Yuen Building**
- **Faculty Exchange Building**
- **Subway**
- **LG1 Festival Walk**
- **MTR Exit C, Kowloon Tong**

---

**University Concourse 4/F**

- **Escalator 4/F to 5/F**
- **Staircase**

---

**Lecture Theatres at 4/F University Concourse, Yeung Kin Man Academic Building**

- **LT-3** CY Sun Lecture Theatre 孫建業演講廳
- **LT-4** Mr & Mrs David T F Chow Lecture Theatre 郭顯庭伉儷演講廳
- **LT-5** Mr and Mrs Lau Tat Chun Lecture Theatre 劉振泉伉儷演講廳
- **LT-6** Chan Kei Bis Lecture Theatre 陳其錦演講廳
- **LT-7** Lily Ching Lecture Theatre 韋麗靜演講廳
- **LT-8** F.A.M. Lecture Theatre 富兆民演講廳
- **LT-9** SAE Magnetics Lecture Theatre 新科實業演講廳
- **LT-10** Peter Ho Lecture Theatre 何振輝演講廳
- **LT-11** John Chan Lecture Theatre 陳振東演講廳
- **LT-12** Mr & Mrs Ho Chun Hung Lecture Theatre 何振雄伉儷演講廳
- **LT-13** Jennifer and Haywood Cheung Lecture Theatre 劉陳家仁伉儷演講廳
- **LT-14** Leung Ka Yik Tai Lecture Theatre 劉家一父子演講廳
- **LT-15** CMA Lecture Theatre 香港中華廠商聯合會演講廳
- **LT-16** Benjamin Kwok Lecture Theatre 郭本傑演講廳
- **LT-17** Wong To Yick Tong Lecture Theatre 黃德元堂演講廳
- **LT-18** Mr & Mrs Chan Hon Pun Lecture Theatre 陳振邦伉儷演講廳
- **LT-19** Ariel Wang Classroom 汪宜樺課室
- **LT-20** Kenneth Lo Classroom 魯凱恩課室
- **LT-21** Chu Wai Tong Fung Classroom 車偉東芳課室
- **LT-22** P4701 B4701, G4702, G4701, Y4702, P4702, Y4702 and P4701 Classrooms 講堂
## Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 1A (LT-16): Syntax 1</th>
<th>Session 1B (P4701): Linguistics and Education</th>
<th>Session 1C (P4703): Sociolinguistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 – 09:15</td>
<td>Online Log-in</td>
<td>Opening Remarks (LT-16)</td>
<td></td>
</tr>
<tr>
<td>09:15 – 09:20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:20 – 09:50</td>
<td>LSHK Outstanding Thesis Awards and Presentation (LT-16)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:50 – 10:00</td>
<td>Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00-10:30</td>
<td>Tommy Tsz-Ming Lee</td>
<td>Shan Wang and Lei Tang</td>
<td>Michelle Man-Long Pang and Sharon Tsoi-Lam Lee</td>
</tr>
<tr>
<td></td>
<td>Head dependencies across coordination and subordination</td>
<td>需要類動詞的教學資源建設</td>
<td>“Nei Up Mud?” — Orthographic Strategies in Non-standardized Romanization of HK-Cantonese (“Martian Code 火星文”)</td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Sze-Wing Tang</td>
<td>Wing Sing Chiu</td>
<td>Ka Lai Mak</td>
</tr>
<tr>
<td></td>
<td>On the Root Phenomena of AttitudeP: Evidence from Ne in Chinese</td>
<td>以電子語料庫設計香港中學生古字學習範圍</td>
<td>Abbreviations and Trisyllabic Terms in Chinese – The case of “會” and “隊”</td>
</tr>
<tr>
<td>11:00-11:30</td>
<td>Ka-Fai Yip</td>
<td>Michelle Li</td>
<td>Qijun Song</td>
</tr>
<tr>
<td></td>
<td>Two kinds of resumption in Cantonese</td>
<td>Glossaries in Chinese almanacs</td>
<td>Intracommunity cohesion and intercultural adaptation: metaphor translation of CPC’s anniversary discourse</td>
</tr>
<tr>
<td>11:30 – 12:30</td>
<td>Annual General Meeting (AGM) (LT16)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:30 – 14:00</td>
<td>Lunch Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session 2A (LT16):</td>
<td>Session 2B (P4701):</td>
<td>Session 2C (P4703):</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td>Dialectology and Sino-Tibetan languages</td>
<td>Language acquisition</td>
<td>Syntax 2</td>
<td></td>
</tr>
<tr>
<td>Chair: Bit-chee KWOK</td>
<td>Chair: Peppina LEE</td>
<td>Chair: John WAKEFIELD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Paper/Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00 - 14:30</td>
<td>Cathryn Donohue</td>
<td>Towards an OT model of differential object marking in Nubri</td>
</tr>
<tr>
<td>14:30 - 15:00</td>
<td>Jiahong Wang and Lawrence Yam-Leung Cheung</td>
<td>Egophoric Marking in Golog Tibetan</td>
</tr>
<tr>
<td>15:00 - 15:30</td>
<td>Yijun Shi</td>
<td>Cross-generational Changes in the Lexicon of Chongqinghua Native Speakers</td>
</tr>
<tr>
<td>15:30 - 16:00</td>
<td>Ruofan Wu and Wai-Sum Lee</td>
<td>Revisiting the three-way phonological contrast of stop consonants in Wuxi Wu Chinese</td>
</tr>
<tr>
<td>16:00 - 16:30</td>
<td>Session 3A (LT16):</td>
<td>Break</td>
</tr>
<tr>
<td>16:30 - 17:00</td>
<td>Ling Zhang and Yik Yiu Fung</td>
<td>香港粵語疑問和陳述語氣之聲學初探 —— 疑問詞、否定極項、句末助詞和句末語調</td>
</tr>
<tr>
<td>17:00 - 17:30</td>
<td>Yueming Sun</td>
<td>Quantification of Chinese henduo and henshao: An implication on the role of morpho-syntactic diversification in natural language quantification</td>
</tr>
<tr>
<td>17:30 - 18:00</td>
<td>Peppina Po-Lun Lee</td>
<td>Epistemic and evidential modal construction mai6...lo1 in Cantonese: a case of modal strengthening and weakening</td>
</tr>
<tr>
<td>18:00</td>
<td></td>
<td>The end of LSHK-ARF2021</td>
</tr>
</tbody>
</table>
This thesis investigates the expression of focus and the phenomenon of verb fronting in Igbo, a Benue-Congo language spoken in the South-Eastern part of Nigeria. Starting from a broader domain of focus, I examine the relationship that exists between different pragmatic focus types and their realisations, narrowing down to the phenomenon of verb fronting with doubling (VFD), a verb focussing device in Igbo which involves the fronting of a non-finite verbal element at the periphery of a sentence whilst retaining a finite verb clause internally.

First, in the general expression of focus in Igbo, I argue that all non-subject focus may be optionally realised ex-situ by fronting and marking the focused item with the morpheme kà. To illustrate this, four pragmatic types of focus are considered: new information focus, corrective focus, selective focus and exhaustive focus. I show that there is no systematic correspondence between any of these focus types and the (morpho)syntactic constructions used in realising them in Igbo. While it is required for a focused subject to be clefted in order to distinguish it from unmarked topic in Igbo, these four focus types may be expressed in-situ or ex-situ. I argue that the use of ex-situ constructions for focus marking in Igbo is a result of pragmatic motivations such as correction, unexpected discourse moves (Hartmann & Zimmermann 2009; Zimmermann 2011) and conversational implicature (Grice 1975).
**Head dependencies across coordination and subordination**

Tommy Tsz-Ming Lee

---

**Introduction**

A recent line of research re-examines the role of head-phrase distinction in movement theories (Hartman 2011; Funkoski 2012; Harizanov 2019; Harizanov and Gribanova 2019; Pesetsky 2002; Lee 2021). An important question in movement theories is whether head movement and phrasal movement are distinctive syntactic operations. This talk concerns two issues with regard to head movement: (i) whether heads can undergo ATB-movement (Ross 1967; Williams 1978) and (ii) whether their movement can license Parasitic Gaps (PGs, Engdahl 1983), in a similar way as phrases. The null hypothesis is that both configurations are allowed by the same mechanism that licenses their phrasal counterpart, which in turn predicts the pattern in (1) and (2).

(1) Schematic representation of ATB-head-movement (\(X\) indicates the launching positions)

\[
\begin{align*}
\text{a. } & \quad \text{X...[CP1]Subj V X }\text{ and [CP2 Subj V X]} \\
& \quad \text{(ATB-movement of heads)} \\
\text{b. } & \quad \text{\^X...[CP1 Subj V Y]}\text{ and [CP2 Subj V X]} \\
& \quad \text{(* due to Coordinate Structure Constraint)}
\end{align*}
\]

(2) Schematic representation of Parasitic Gaps licensed by head movement (\(\Delta\) indicates a PG)

\[
\begin{align*}
\text{a. } & \quad \text{X...Subj [adjunct ... \Delta ...] X} \\
& \quad \text{[PGs licensed by head movement]} \\
\text{b. } & \quad \text{\^X...Subj [adjunct ... X ...] V} \\
& \quad \text{(* due to Adjunct Islands)}
\end{align*}
\]

**Observations**

Based on observations in Cantonese, I show that this null hypothesis is only partially borne out: while ATB-head-movement is attested, PGs fail to be licensed by head movement. To establish this claim, two ingredients are necessary. First, it is important to show that both configurations are attested with phrases in Cantonese.

(3) \text{bin-wai zogkga}\ [\text{[IP1 Aaming zungii e ] [IP2 Aafan m zungii e ]}] \quad \text{ATB-movement of wh-expressions}

which-cl writer Aaming like Aafan not like

‘Which writer does Aaming like but Aafan dislike?’ (cf. Pan 2011)

(4) \text{bingo Aaming [hai gin \(\Delta\) zicin] zau cau-zo bingo?} \quad \text{Wh-movement licensing a PG}

who Aaming at meet \(\Delta\) before already fire-perf

‘Which person is it who Aaming fired before meeting?’ (cf. Lin 2005)

Second, it is argued that verb topicalization involves head movement (and verb doubling) in Cantonese (Lee 2021; Cheng and Vicente 2013). Verb topicalization shows connectivity effects (as in (6) and (8) below).

**Testing the configurations in (1) and (2)** Verb topicalization is allowed in an ATB-fashion, as in (5). It is however disallowed if the topicalized verb only matches the one in the first conjunct, as in (6).

(5) \text{maai, ngo gokdak [Aaming hai m-seong maai] ji [Aafan hai m-gaam maai]} \quad \text{ATB-movement of wh-expressions}

buy I think Aaming cop not.want buy and Aafan cop not.dare buy

‘As for buying, I think Aaming doesn’t want to buy and Aaming dare not to buy.’

(6) \text{* maai, ngo gokdak [Aaming hai seong fong] ji [Aafan hai soeng zoi maai]} \quad \text{ATB-movement of wh-expressions}

buy I think Aaming cop want sell and Aafan cop want again buy

Int.: ‘As for buying, I think Aaming wants to buy more and Aafan wants to sell.’

The situation in PGs is different. Verb topicalization does not license a potential site of PG in the adjunct, as in (7). (8) shows an island effect if the topicalized verb originates in the adjunct clause.

(7) \text{? maai, Aaming hai soeng [hai Aafan tai keoi hoji \(\Delta\) zicin] maai ge}

buy Aaming cop want at Aafan remind him may \(\Delta\) before buy sfp

Int.: ‘As for buying, Aaming wants to buy before Aafan reminds him that he may (buy) (but...’)

(8) \text{* maai, Aaming hai soeng [hai Aafan tai keoi hoji maai zicin] zou ge}

buy Aaming cop want at Aafan remind him may buy before rent sfp

Int.: ‘As for buying, Aaming wants to rent before Aafan reminds him that he may buy (but...’)

**Analysis** For the ATB-case in (5), it can be treated in an identical way as phrasal ATB-movement. For the PG-case in (7), I suggest that the failure of head movement to license PGs does not necessitate a head-phrase distinction in movement theories. I propose that predicates are systematically prevented from licensing PGs under the null operator theory of PGs (Nissenbaum 2000), which suggests that PGs are in fact traces of a null operator that moves within the containing adjunct.

(9) A hypothetical structure for (7), under the null operator theory of PGs

\[\text{maai, Aaming hai soeng [OP hai Aafan tai keoi hoji \(\Delta\) zicin] maai ge}\]

Crucially, I suggest that (9) is ruled out because null operators cannot be of types of predicates, e.g., \(<e,t>/<e,<e,t>>\). This is supported by observations that constructions involving null operators do not apply to predicates in general. For example, (i) relativization cannot target predicates and, (ii) wh-expressions lack a verbal variant across languages, i.e., no interrogative verb (Irurtzun 2020).

**Implications**

1. The presence of ATB-movement of heads supports a movement theory that does not distinguish head movement from phrasal movement. Head movement fails to license PGs for reasons independent of the phrase-structural status of the moving element.
2. The findings support the null operator theory of PGs but speak against the same treatment to ATB-movement (which would otherwise be ruled out) (Munn 1992; Franks 1993). This suggests a non-uniform treatment of the two configurations.
On the Root Phenomena of AttitudeP: Evidence from Ne in Chinese
Sze-Wing Tang
The Chinese University of Hong Kong

The architecture of the clausal periphery has been a hot topic in the study of the cartographic syntax (Rizzi 1997, 2004; Cinque 1999; among many others). According to the split CP hypothesis under the cartographic framework, CP in the complementizer layer can be decomposed into a number of functional projections, many of which should be in the root and cannot be embedded, exhibiting root phenomena. In this paper, the root phenomena of AttitudeP (abbreviated as “AttP”), a functional projection associated with speaker’s subjective attitude in the complementizer layer, will be reviewed with a detailed examination of the syntactic properties of ne, a particle that is used in Chinese, such as the one in (1) that is treated as a sentence-final particle. It will be argued that ne, as the head of AttP, can occur in non-root contexts while the root phenomena of ne are derived from its “extended projections”, i.e., the projections headed by Degree and CoA (Call on the Addressee).

In their syntactic hierarchy, Pan and Paul (2016) propose that the complementizer layer can split into Attitude, Force, and Low C. The particle ne is the head of AttP in the highest position in the root clause, exhibiting the root phenomena, such as (2). Pan (2018) further proposes that the phrase AttP1 headed by ne is selected by a higher functional category Att2 in the syntactic hierarchy: “AttP2 > AttP1 > SQP > iForceP > OnlyP > S.AsP > …”. Given that AttP1 is in the root, the root phenomena of ne can also be explained.

Zhu (1982) has pointed out that ne can follow a subordinate clause, such as (3), functioning as a topic marker. Pan (2018) also notices that ne can be used in ex-situ cleft focus sentences, such as (4), apparently functioning as a focus marker. According to Pan (2018), ne in (3) and (4) is still analyzed as the head of AttP that selects an “incomplete” clause TP. AttP is located in the specifier of TopP or FocP in the main clause, as represented in (5).

Assuming that the sentence-final particle ne and the topic/focus marker ne are treated on a par, heading the same phrase, i.e., AttP, it is argued that the major difference between them lies on their “extended projections”. The sentence-final particle ne is selected by Degree and CoA, forming a structure like (6) (cf. Tang 2020). Given that the sentence-final particles that are overt realizations of Degree and CoA occur in the root only, the root phenomena of the sentence-final particle ne are explained. On the other hand, the topic/focus marker ne is not selected by any functional categories. The phrase headed by the topic/focus marker ne, i.e., AttP, is adjoined to the main clause directly. The root phenomena vanish.

There are some interesting consequences along these lines. AttP in the non-root contexts can be used as adjuncts only, not in the argument positions. See the contrast between the clausal subject in (2) and the subordinate clause in (3). As an adjunct, AttP is adjoined to clauses only. It cannot be adjoined to nominal phrases, such as (7). The potential theoretical implications from the syntax of AttP may take us a considerable way towards explaining the reasons behind the complicated facts of the distribution of the Chinese particles.

(1) Ta du shenme ne? ‘Who did s/he read?’
(2) [Ta du shenme (*ne)] zui heshi? ‘For which x, x a thing, that s/he read x is the most suitable?’
(3) [Yaoshi shizai zhao-bu-zhao ne], na ye zhihao suan le. ‘If it can’t be found, let’s forget it.’
(4) [Shi Zhangsan de taidu ne], laoban hen bu xihuan. ‘It is Zhangsan’s attitude that the boss does not like.’
(5) [TopP/FocP [AttP [TP … ] ne ] Top/Foc … ]
(6) CoA > Degree > Attitude > Temporal > Event
(7) [du yuyanxue lunwen de (*ne)] na ge ren ‘that person who reads linguistics papers’
Two kinds of resumption in Cantonese
Ka-Fai Yip

**Background.** Resumptive pronouns (RPs) are pronominal elements that appear in a position in which syntactic gaps might have occurred (McCloskey 2017). Languages employ resumption strategies differently. Some use RPs as a saving device when movement fails (e.g. English), and some use them in movement dependencies as spelled out traces (e.g. Vata) (Rouveret 2011).

**Resumption in Cantonese.** I argue that both resumption strategies can be found in Cantonese, and they are manifested in the morphological forms of RPs. Specifically, Cantonese has two kinds of RPs: one agrees with the antecedent (in person and number); another does not agree with the antecedent and always has the default form, i.e. third person singular keoi. The agreeing RPs do not involve movement, whereas the non-agreeing RPs always involve movement.

(1) Two resumption strategies in Cantonese:

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Generation</th>
<th>Movement properties?</th>
<th>As saving device?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGREETING RPS</td>
<td>By base-generation</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>NON-AGREEING RPS</td>
<td>By movement</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Post-verbal keoi as a non-agreeing RP.** It has been long observed that a “dummy” keoi may occur in disposal constructions in Cantonese (Cheung 1992, Man 1998, Mai 2003; see also Xu 1999 for Mandarin & Shanghainese), as in (2). Keoi alternates with a gap of object movement and has a mismatch with the antecedent in number, as opposed to an agreeing RP that is not allowed.

(2) Nei jiu zoeng {di syu/ *syu;} tai-jyun {_i / keoi/ *keoiidei;} 2SG must DISP CL.PL book book read-finish 3SG 3PL

‘You must finish reading the books / *some books / *books.’

I suggest that this post-verbal keoi is a non-agreeing RP resulted from the object movement. The object movement has interpretive effects. For example, an CL-N, ambiguous between a definite and an indefinite reading (Cheng & Sybesma 1999), is disambiguated as definite. A bare noun is also banned. Note that, however, the object may also occur post-verbally, as in (3). I argue that even in (3) object movement still occurs, as evidenced by the same disambiguation effect and constraint on objects. The post-verbal position is resulted from further verb movement (=4).

(3) Nei jiu tai-jyun {di syu/ *syu;} keoi 2SG must read-finish CL.PL book book 3SG

‘You must finish reading the books / *some books / *books.’

(4) [AspP V-Asp [vp Obj] /[vp <Obj>=keoi]]

The relation between non-agreeing keoi and object movement is further confirmed by (5)-(6) where unergative verbs and unaccusative verbs, taking no objects, are banned.

(5) ??Paau-zo keoi (6) *Aaming lai-zo keoi run-PERF 3SG Ming come-PERF 3SG

Int: ‘Run!’ Int.: ‘Ming should come.’

**Agreeing RPs vs. non-agreeing RPs.** Idiom preservation. Only non-agreeing RPs, but not agreeing RPs, pattern with gaps in preserving idiomatic reading, i.e. showing movement properties.

(7) Di seoi nee jinggoi ceoi-maai {_i / keoi/ keoiidei;} sin CL.PL water 2SG should blow-ALSO 3SG 3PL SFP.first

Lit.: ‘As for those (that) water, you should blow them first.’ (gap, keoi, keoiidei)

Idiom: ‘As for those gossips, you should finish them first.’ (gap, keoi)

**Locality.** Non-agreeing RPs are also similar with gaps in observing island constraints. Agreeing RPs, in contrast, may serve as a saving device to ameliorate island violations.

(8) Go di [cp [Adjunct]ugwo ngo laai-zo {*keoi/ keoiidei;} daaigaa zau wui hou hoisam] ge gougun if 1SG arrest-PERF 3SG 3PL everyb. then will very happy MOD official

‘Those officials who if I arrested them everybody will be very happy.’
需要類動詞的教學資源建設
Shan Wang and Lei Tang

摘要：

詞匯是第二語言教學中的語言要素之一，但詞匯知識零散龐雜，如何確定哪些詞匯知識作爲教學重點，實現詞匯教學效率的最優化，是教師們常常面臨的一個困境。首先，本文選取幷分析5個常用的漢語需要類動詞：急需、要求、需要、索取、索要。其次，本文大規模語料庫爲源語料，下載包含以上請求類動詞爲關鍵詞的句子144166條。每個詞等距抽取其中的300條句子，建立需要類動詞的單句語料庫。然後，利用自行開發的句法語義標注工具，對這些句子進行自動依存句法和依存語義標注，幷逐句進行人工覆核。最後，對句法成分和語義角色進行分類和統計，從而歸納該類動詞的句法和語義特點。本文主要采用依存語法理論，幷使用自主開發的標注工具，對需要類動詞的句法和語義進行深入系統的分析，研究結果不僅有助于提高漢語第二語言詞匯教學的效率，也可爲漢語詞典的編纂提供參考。

關鍵詞：詞匯教學、句法、語義、需要類動詞、詞典
以電子語料庫設計香港中學生古字學習範圍

Wing Sing Chiu

多年來，香港在「全球學生閱讀能力進展研究」（PIRLS）一直名列前茅，但近年閱讀成績與閱讀參與度有下降跡象，學生的閱讀教育實在不容忽視。早年香港學生在 PIRLS 獲得佳績似乎令人振奮，但自 2012 年開始的香港中學文憑試的中文科一直被社會人士稱為「死亡之卷」，不少考生對閱讀卷聞風喪膽，香港教育局於 2015-2016 學年重新實施文言文教育，引入 12 篇「指定文言經典學習材料」，希望能藉此擴展學生的閱讀面，提升語言文化水平，因此文言文的教學變得越來越重要。長期以來，中學教師從課程設計、教學、評估等不同角度提升中學生古文學習的成效，構思主要依據教師的教學經驗和學生成績，鮮有從字詞角度制定古文學習框架。本研究嘗試運用電子語料庫設計中學生的古字學習範圍和學習次序，期望可為師生提供另類的教學參考。
Glossaries in Chinese Almanacs
Michelle Li

The traditional Chinese almanac (通勝/通書) is a book containing interesting items such as (in)auspicious dates, proverbs, diseases, religions, sciences, etc. In many traditional families, an almanac is a must-buy item every year. In this study, I examine the Chinese-English glossary in a 19th century and contemporary almanacs. It is not clear when such bilingual glossary began to be included in the almanacs but a source 中西華洋通書 Zhongxi huayang tongshu (European Chinese Almanac) (1858) compiled by the American missionary Justus Doolittle shows that it can be dated at least in mid-19th century. The European Chinese Almanac which was published in Fuzhou contained a short introduction to the English letters and their pronunciation, a description of the phonetic system of the Fuzhou dialect, and a list of English words and phrases transliterated in the Fuzhou dialect. Entries in the glossary include numerals and words mainly related to trade. For example, the entry for tea looks like this:

茶葉 ‘tea’ 與知字之音相同 ‘similar in sound with the word 知 [ti44]’

The 19th century was the heyday of China trade and many Chinese wanted to learn some English in order to communication with the foreigners. However, not many Chinese had the opportunity to receive English education. Instead publications such as the almanacs and chapbooks provided an alternative for Chinese to learn (pidgin) English informally. Nowadays similar kind of glossary can still be seen in some almanacs sold in Hong Kong, although most people no longer learn English in this manner. In this study, I discuss linguistic features and origins of bilingual glossaries in Chinese almanacs and almanacs as an informal channel of language learning.
“Nei Up Mud?” — Orthographic Strategies in Non-standardized Romanization of HK-Cantonese (“Martian Code 火星文”)
Michelle Man-Long Pang and Sharon Tsoi-Lam Lam Lee

“Written Cantonese” generally refers to the use of traditional Chinese characters to represent Cantonese morphemes; however, with the growing prevalence of ad hoc Cantonese romanizations in computer-mediated communication (particularly instant text messaging), such form can also be considered as a form of written Cantonese (Bauer, 2018). This romanized form will hereinafter be referred to as “Martian Code 火星文” (MC).

While romanization-based systems are commonly associated with Eurocentrism and prescriptive foreign language learning (Koo, 1975), MC is a descriptive, community-collective sound-based writing system. Users of the system can easily understand one another regardless of the multitudinous variations in spelling. This mutual intelligibility implies the presence of a shared frame of reference governing MC’s orthographic mechanisms.

The widespread use of ad hoc romanizations also exist in, e.g., Arabic (Hamdan, 2016), Pakistani Urdu (Irvine, Wesse, & Callison-Burch, 2012), and Russian Cyrillic (Ivanov, 2017). Lee (2002) and Fung and Carter (2007) piloted the research on this phenomenon in HK-Cantonese, but have yet to unveil how users are informed in their orthographic choices. Tanios’ study (2016) on Lebanese-Arabic romanizations brings attention to possible correlations between sociolinguistic factors and orthographic decisions, but such exploration was inconclusive due to insufficient data. Our objective is to further their concept and enrich it with empirical data in MC.

This study investigates patterns in HK-Cantonese speakers’ romanization practices through a transcription task. Participants (n=10) are given Cantonese sentences written in traditional Chinese characters, and asked to rewrite them in MC according to their habits. The resulting script is then deconstructed and categorized into the actual phonemes they represent to reveal how each sound is transliterated, hence unveiling differences among users. Examples of such disagreements include “r/h” insertion in open syllables like “lah/lor”, palatalization of certain affricates and sibilants, and voicing and aspiration on onset and coda consonants. These observations could shed light on the strategies employed by MC users to disambiguate similarly romanized words for clarity in this non-standardized mode of written communication.

Through this analysis, we aim to discover possible correlations between phonemic awareness and HK-Cantonese speakers’ mental phonology-orthography schemas, and explore underlying sociolinguistic factors affecting their romanization of the language. Given the exposure of HK-Cantonese speakers to English and Mandarin Chinese, especially with the familiarity with teaching tools such as phonics and pinyin, we also hope to provide evidence into language contact and its effect on Hong Kong people’s written representation of their mother tongue. (Word count: 400)

References
Abbreviations and Trisyllabic Terms in Chinese – The case of “會” and “隊”

Ka Lai Mak

Following the massive growth of disyllabic terms in the Chinese lexicon in the last century, a rising trend of trisyllabic and polysyllabic terms is observed. The formation of trisyllabic terms deserves more attention than it has, especially in their derivation and formation. Many trisyllabic terms are formed by a combination of a disyllabic term and a headword. With headwords of “會” hui and “隊” dui as examples, this study draws on the LIVAC Pan-Chinese synchronous corpus (https://en.wikipedia.org/wiki/LIVAC_Synchronous_Corpus) to explore the development of trisyllabic terms.

It is noted that, in general, the nearly 7000 terms with the headword “會” is 10% less than those with the headword “隊”. However, for the trisyllabic terms, an opposite result was found: there were 20% more terms with “會” headwords than those with “隊” headwords. We extracted terms with headwords “會” and “隊” from the LIVAC Pan-Chinese corpus with two periods “windows”, ten years apart, from 1996 to 2000, and from 2011 to 2015. According to the frequency distribution of the trisyllabic terms with headwords “會” and “隊”, the top 100 entries in Beijing, Taiwan, and Hong Kong, and the common terms in the three regions were analyzed, and among these high-frequency words, many cases of abbreviations were found.

An attempt is made to analyze the linguistic structure of these abbreviations and the contribution to their development by extralinguistic factors. Drawing on the two ways of: (1) morphemic truncation (縮字詞) and (2) paraphrasing (縮意詞) in a previous study, we shall show that the significantly more numerous cases of abbreviated “會” than the abbreviated “隊” terms may be accounted for not only by structural formation but also by societal functions and needs.
Intracommunity cohesion and intercultural adaptation: metaphor translation of CPC’s anniversary discourse

Qijun Song

Abstract: The 100th anniversary of the Communist Party of China reflects a conspicuous phase where a socialist community has been unfolding its resolution of rejuvenation to the globe. Its speech utilizes plenty of metaphors to create an encouraging function. Some of the English translations, however, have endured discourse adaptations, only to achieve milder effects. To elaborate on these adaptations, the study investigates first and foremost through our self-built corpus the metaphors in the source text (ST) with special concern to their functions. Then, their corresponding translations in the target text (TT) are analyzed based on our modified Ideological Square Model. The results show that (1) while most of the metaphors are faithfully rendered in the TT, the WAR metaphor have seen a significant adaptation to moderate aggressiveness; (2) the traditional value of harmony and restrained foreign policy are discursively at play in metaphor translation, though China attempts to reinforce his tone for intra-cohesion and resolution voicing in the ST. We argue that cultural and ideological factors are likely to mingle in political translation to adapt the represented attitude in case of intercultural misinterpretation.

Keywords: adaptation, metaphor translation, political discourse, CPC
Differential object marking (DOM) is the phenomenon whereby a subset of ‘prominent’ object arguments is morphologically distinguished based on (typically) inherent properties such as definiteness, specificity, animacy, or information structural considerations such as topicality or focus. There have been several approaches to modeling DOM, within the Minimalist tradition and the Optimality Theoretic (OT) approach. In this paper I present data from Nubri DOM that challenges existing Minimalist analyses, but appears to be readily modeled using OT.

There are two types of DOM: The first, and most commonly reported, involves inherent properties of the object argument determining the case marking outcome (e.g. de Swart 2007; de Hoop & Malchukov 2008; Malchukov & de Swart 2009). However, there are a few languages in which it is the simultaneous evaluation of properties of both subject and object arguments that determines the case marking outcome, a phenomenon that has been referred to as ‘global’ distinguishability or relative scenario splits (Haspelmath 2018). This paper reports on differential object marking in Nubri, an endangered Himalayan language (Tibeto-Burman, Nepal), which has this latter kind of DOM in which object marking is determined only through simultaneous evaluation of properties of animacy of the clausemate arguments as seen in (1).

(1) a. Nga mo tung yin. b. Kho mo-(la)* tung so.
   1.SG 3.SG.F see AUX dog 3.SG.F-DAT see AUX
   ‘I saw her’ ‘The dog saw her.’

In (1a) the object of the sentence mo bears no case, while in (1b), we see that ‘her’ mo is marked by the dative case -la. This is because the arguments in (1a) follow expected assignments of higher animate to subject, lower animate to object. In (1b) we see that the opposite is true, and there is a ‘markedness reversal’ and the object must now bear case. However, the simultaneity of referencing both arguments to determine case marking is not the only aspect of Nubri DOM that must be accommodated by a formal model. The model additionally needs to identify the specific environment where the object is just ‘one step’ lower on the animacy scale than the subject, where the case is now optional, as shown in (2).

(2) Khyo mo-(la) tung so.
   2.SG 3.SG.F-DAT see AUX
   ‘You saw her’

There have been many recent approaches to formal models of DOM. Within the Minimalist literature, DOM has been modeled as object visibility (e.g. Lyutikova & Pereltsaig 2015), object raising, (e.g. Baker & Vinokurova 2010), or variable object licensing (e.g. Kalin 2018). Each of these approaches has their strengths and may model the given data well, but fall short with respect to being able to readily model the relativized DOM data that simultaneously references subject and object properties to determine the outcome of case in a specific clause as in Nubri. For this type of DOM movement-based analyses have been proposed, but later convincingly ruled out as an approach to DOM more generally by Kalin & Weisser (2018). Aissen (2003), de Hoop & Malchukov (2008), de Hoop (2009), and others represent efforts to formally model DOM within an Optimality Theoretic framework. While the data presented therein do not require simultaneous reference to both arguments of a transitive clause, I show that the general approach lends itself well to accommodating data of this kind. I present an analysis of the Nubri data within an OT framework which captures the identified environments and models the observed case variation data. This analysis contributes not only to our empirical understanding of DOM, it highlights the challenges of formally modeling relative scenario splits and shows how previous OT analyses can be naturally extended to accommodate this simultaneous clause-mate evaluation of properties to understand the distribution of object case marking in Nubri.
BACKGROUND
Egophoric marking is common in Tibetic languages. Unlike verbal marking systems typical in Indo-European languages, the core agreement pattern of egophoricity is sensitive to both person feature and clause type (Tournadre 2008, Post 2013). For example, the ego marker is found in 1st person declaratives (1) and 2nd person interrogatives (2), while the non-ego marker elsewhere. However, apart from these basic features, there are cross-linguistic variations on the conditions governing the use of these egophoric markers. Some languages seem more flexible, i.e. being ‘loose and manipulable’ with the person requirement (San Roque et al. 2018: 5) but some others are inflexible, associating exclusively with specific person values. Other factors affecting egophoric marking include volition (San Roque et al. 2018: 10) and ‘personal knowledge or intention on the part of the actual speaker’ (Tournadre 2008: 295). This study examines the grammatical requirements of egophoric markers in Golog Tibetan, an under-studied Tibetic dialect in Qinghai, China.

QUESTION
How do we account for the grammatical requirements of egophoricity in Golog?

ANALYSIS
Previous research on Tibetic egophoric marking (Tournadre 2008) have noticed its prominent flexibility. Garrett (2001) proposed strong/weak ego to account for the flexibility in Lhasa Tibetan egophoric marking. The former is associated with ‘person’ strongly, and therefore conforms to the prototypical egophoric distribution, while the latter has weak person association, and thus exhibits atypical distribution. Nonetheless, Garrett’s (2001) analysis fails to explain its distinct egophoric distribution pattern in Golog Tibetan. We argue Golog egophoricity does not depend on the person feature. It is conditioned by three semantic/pragmatic-related factors, namely (a) the speaker’s certainty towards the proposition (CERTAINTY), (b) the sentence subject’s semantic role (SR), and (c) whether the content of the proposition is the speaker’s assimilated knowledge (AK). When all three conditions are met, ego is used (3); otherwise, non-ego is employed (4). The superficial ‘person-sensitive’ pattern in Golog is due to the correlation of person with these factors.

(1) nga bod=pa  yin
   I   Tibetan  be.EGO
   ‘I am a Tibetan’
(2) khyed=rang bod=pa  yin pas
    you   Tibetan  be  INTERR.EGO
   ‘Are you a Tibetan?’ (DeLancey 1990:295; Lhasa)
(3) mos  lwa  bkyu  gi yod.
    she.ERG cloth  wash  IMPERFECTIVE.EGO
   ‘She’s washing clothes.’
(4) nga sgor mo  yod ku.
    I  money  have.NON-EGO
   ‘I have money!’

SELECTED REFERENCES:
Cross-generational Changes in the Lexicon of Chongqinghua Native Speakers

Yijun Shi

Chongqinghua is a Southwestern Mandarin variety of the Sinitic branch of Sino-Tibetan, with about 32 million native speakers (Chongqing Bureau of Statistics, 2021). It is a lingua franca spoken in Chongqing, a municipality directly controlled by the central government of China, in southwestern region of this country.

The lexical changes of a language reflect the societal changes in the area where the language is spoken (Yang, 2012, p. 194). To study the cross-generational changes of the lexicon used by Chongqinghua native speakers born and raised in Chongqing, two groups of Chongqinghua native speakers are studied: (1) those who are now 20-25 years old, and (2) those who are now 50-55 years old. In this research, picture naming tasks are conducted to investigate if linguistic changes on lexical inventories happen over time in this speech community of Chongqinghua native speakers. In addition, follow-up individual interviews are conducted to explore the reasons driving the cross-generational changes of the lexical inventories. It is found that the lexicon of younger-generation Chongqinghua native speakers is different from that of the older-generation speakers to various degrees. Moreover, the lexicon of younger-generation Chongqinghua native speakers is more like the lexicon of Putonghua than that of the older-generation Chongqinghua native speakers. The promotion of Putonghua as the national standard language in China (Ministry of Education of the People’s Republic of China, 1956) has contributed to the lexical differences between younger-generations and older-generation Chongqinghua native speakers. How the changes happened is also influenced by language attitudes and gender differences. Yang (2012, pp. 194-198) summarizes some changes in Chongqinghua lexicon, but she does not take a cross-generational speaker-oriented view to examine individual lexical changes. It is expected that this research can shed light on the cross-generational changes in the lexicon of Chongqinghua native speakers and on the current state of Chongqinghua.

References


Most Chinese dialects today have only a two-way phonological contrast in stop consonants, which is between the ‘voiceless aspirated’ and ‘voiceless unaspirated’ categories. In Wu Chinese, however, three phonological categories of stops are retained from Middle Chinese: ‘voiceless unaspirated’ (quan qing 全清), ‘voiceless aspirated’ (ci qing 次清) and ‘voiced’ (quan zhuo 全濁). The ‘voiceless aspirated’ stops always have a large positive voice onset time (VOT), which contrasts them consistently with the other two categories. The ‘voiceless unaspirated’ stops are always phonetically voiceless as well but exhibit a relatively shorter VOT. As for the ‘voiced’ stops, previous studies found they are phonetically voiced (VOT<0) only in the word-medial position. The word-initial ‘voiced’ stops appear to be devoiced phonetically (VOT>0), and they are thought to distinguish from the ‘voiceless’ counterparts (especially the unaspirated category) through breathy voiced phonation (as suggested by Cao & Maddieson (1992) among others), in addition to pitch/F0 level. The abovementioned patterns of the three-way contrast of stops have been reported in many previous northern Wu studies. The voicing contrast patterns largely remain constant across studies. For phonation type contrasts, however, there are notable differences regarding the use of measuring parameters (including different spectral and noise measures) as well as the results given by each parameter (Tian & Kuang, 2019). Despite that, several recent studies have reported that breathy voice of the ‘voiced/devoiced’ stops tends to disappear in Shanghai Wu (Gao, 2016; Zhang & Yan, 2018; Tian & Kuang, 2019) and other northern Wu varieties (Shi et al., 2020) at the present time.

The present study therefore revisits the three-way phonological contrast of northern Wu stops through performing acoustic analysis of the VOT and breathiness of the three categories of stops in a less studied northern Wu variety, Wuxi Wu. The study also explores the possible age-related variations in stop production by collecting speech data from both young adults (20-30 years) and elderly speakers (60-80 years). Results show that the ‘voiced/devoiced’ stops in Wuxi Wu are always devoiced in the word-initial position in both groups but are also partly devoiced in the word-medial position for young speakers. Concerning the phonation type contrast patterns, for the ‘voiced/devoiced’ and ‘voiceless unaspirated’ stops the elderly group showed relatively consistent indication of breathiness from both spectral and noise measures in the word-initial position, while for the young group only noise measures were relatively consistent. For the ‘voiced/devoiced’ and ‘voiceless unaspirated’ stops in the word-medial position, the difference in either spectral or noise measures is not apparent for both groups of speakers.

These results above, with more details to be addressed at the presentation, added to the empirical observations of voicing and phonation type contrast patterns in northern Wu at the present time and extended the possibility that some patterns of sound change are underway in northern Wu, which calls on systematic investigations by future studies.

Selected references
The Neutral Tone in Child Mandarin: Conflicting Experimental Findings and Contrasting Conceptions
Xiaohui Hu¹ and Thomas Hun-tak Lee²
¹Tianjin Normal University
²Chinese University of Hong Kong

Previous experimental studies of Mandarin-children have reported conflicting findings on when children become sensitive to the neutral tone. Earlier studies (Li and Thompson 1977; Hua and Dodd 2000) show that children as late as four and a half years of age still cannot produce the neutral tone correctly, exhibiting three types of errors: lengthening the neutral tone syllable; replacing the neutral tone with its lexical tone counterpart, e.g. [tʰou2 fa⁴] for [tʰou2 fa]; and omitting the neutral-tone syllable. More recent studies, however, argue that children are in command of the neutral tone by age three, based on production of pitch form (Fan 2016; Tang et al. 2019). In this paper, we will argue that the conflicting claims about Mandarin-children’s acquisition of the neutral tone can be understood in terms of different assumptions about the phonology of the neutral tone, as well as differences in acquisition criteria. We will also argue that previous studies of the neutral tone miss some of its essential features which should be investigated in full to gain a systematic understanding of how children acquire the neutral tone.

Two approaches have been adopted in the analysis of the neutral tone in Mandarin Chinese. One identifies the neutral tone as weak stress (Chao 1968; Kratochvíl 1974; Duanmu 2007), while the other considers the neutral tone as a fifth tone on a par with the other four lexical tones (Shi 2006). If one adopts the weak stress analysis, then one would measure both duration and pitch to determine acquisition, because syllables carrying weak stress have a shorter duration and an unfixed fundamental frequency (F0) (Chao 1968; Lin and Yan 1980; Cao 1986). Moreover, one would need to see whether children show the two acoustic correlates of weak stress not only in the production of familiar words learned from the input, but also for unfamiliar or novel words. If the tonal analysis is adopted, the durational properties of the neutral tone would not be a major concern. Instead, one would focus on children’s mastery of the context-dependent pitch form of the neutral tone, and whether they contrast the neutral-tone with the other four lexical tones.

It should also be pointed out that previous experiments group together both neutral tone syllables which are lexically specified (as in disyllabic simple words and some functional suffixes), as well as some neutral tone syllables which can be predicted from context (as in reduplicated kinship terms). We emphasize the need to investigate the wider distribution of context-dependent neutral stress syllables which alternate with full tones, and which are prevalent in child-directed speech, including the object pronouns, the resultative verbal endings, and the localizers.

Selected References
Previous studies in Cantonese phonotactics found that adult Cantonese speakers rated accidental gaps higher than systematic gaps in wordlikeness judgement tests (Kirby & Yu, 2007). We questioned at what age Cantonese-learning infants were able to distinguish the difference between legal and illegal Cantonese phonotactic patterns, and whether the computational complexity of different gap types affects the order of acquisition in phonotactics learning. In a Headturn Preference experiment, we tested two coronal gaps and two labial gaps:

1. /ɔː uː/ cannot occur between coronal onsets and codas (SL3COR)
2. coronal onsets cannot be followed by /uː/ (SL2COR)
3. labial onset cannot co-occur with labial coda (SL3LAB)
4. labial onset cannot be followed by a front rounded vowel (SL2LAB)

These gaps are of different levels of computational complexity in terms of strictly-local (SL) and strictly-piecewise(SP) grammar: (1) and (3) are at least SL3, while (2) and (4) are SL2. More specifically, (3) is also consistent with a long-distance SP2 grammar as the vowel in between onset and coda can vary. The computational complexity hypothesis predicts that patterns (2) and (4) are easier than patterns (1) and (3). Four pairs of legal/illegal minimal pairs were created for each gap, and the 32 pseudowords are counterbalanced across 4 sets of words. Infants were randomly assigned to listen to one of the four sets of words, in which Gap Type was treated as a within-subject fixed factor. Looking time was recorded for analysis. Our results show that 5-month-old infants were not sensitive to any of the tested phonotactic gaps, whereas 7-month-old infants showed a marginally significant difference in looking time between legal and illegal trials of (4) SL2LAB (p=0.069), and 12-month-old infants showed close to significant differences in all gap types except for the SL2 coronal gap (SL2LAB: p = 0.055; SL3COR: p = 0.062; SL3LAB: p = 0.064). The overall results are consistent to the predictions made by the complexity hypothesis, where the simpler phonotactic rules (i.e. SL2) are learned before the more complex ones. Data from 12-month-old infants illustrates that they have acquired phonotactics grammars of SL2 and SL3, the insensitivity towards the SL2 coronal gap was possibly due to reasons other than complexities.
Infants’ Learning Bias in Vowel Harmony: Opaque and Transparent Vowels
Rena Yip and Regine Lai

Vowel harmony is the phonological process in which vowels share phonological features with other vowels within a domain. The process may be long-distance, as the harmonizing vowels can be separated by consonants and non-harmonizing vowels, which is also known as neutral vowels. There are two types of neutral vowels: opaque and transparent. Opaque vowels do not undergo harmony and restarts the harmony domain. Transparent vowels are invisible to the harmony. Transparent vowels are considered more challenging than opaque vowels for learners (Hayes & Londe, 2006; Finley, 2015). They suggest that both local and distal agreement constraints are active when transparent vowels are involved, whereas for opaque vowels, only local agreement constraints are necessary. For example, a vowel harmony pattern requires a local constraint AGREE[F] and it is violated when a [-F] vowel follows a [+F] vowel. The distal constraint *[aF]...[-αF] is violated when [+F] vowel is followed by a [-F] vowel, with any number of intervening vowels and consonants in between. Since transparent VH violates both local and distal constraints, Finley (2015) predicted that transparent vowels are more difficult to learn than opaque vowels, and her claim is supported by native English-speaking adults’ learning results using artificial grammar learning. However, whether this learning bias is present in infants is yet unknown.

The present study investigated the presence of the learning bias of opaque and transparent vowel harmony in 14-month-old toddlers. The participants were exposed to a familiarization phase of 80 seconds of audio stimuli that conformed to either the opaque or transparent VH (depending on the condition they were assigned to). The participants were then presented with test stimuli and their looking time was recorded. We analyzed the looking time of the participants by fitting the data to a linear mixed effect model, and found that there is a marginal significant interaction of the Legality and Sex (F=3.64, p=0.058) and a significant interaction effect of Legality, Condition and Sex (F=5.84, p=0.017). A post-hoc analysis reveals that male but not female participants were able to distinguish legal from illegal test items in the Transparent condition, and neither group could distinguish legal from illegal test trials in the Opaque condition. These results are different from the adult findings mentioned above and the results imply that toddlers use a different learning strategy from adults when faced with the transparent and opaque vowel harmony patterns.
Object of study  Previous studies on Japanese focus prosody argued that Japanese focus is marked by the on-focus expansion and conditional post-focus compression (only appearing after accented words). In addition, focus in the penultimate position did not show post-focus compression in Japanese (Lee & Xu, 2018) and other SOV languages, such as Turkish (Ipek, 2011). A holistic analysis of all focus types in Japanese remains to be done. The focus production data were usually elicited with sentence reading tasks, but we do not know whether the less natural task of sentence reading will affect realization of focus. In the present study, we designed a semi-naturalistic task to investigate whether and how native speakers of Japanese differentiate three focus conditions (broad, narrow and contrastive) under two accent types (accented and unaccented) for penultimate focus.

Methodology  Twenty-eight semantically meaningful Japanese SOV sentences were prepared, including fourteen sentences with three accented words (condition A) and the other fourteen with three unaccented words (condition U). Three question types were used to elicit broad, contrastive, and narrow foci on the penultimate (object) position, totalling 84 dialogue pairs. To increase the naturalness of stimuli production, a question-answer dialogue method was used with sentence-corresponding pictures as the dialogue triggers. Four native speakers of Tokyo Japanese (two male and two female) formed two pairs of participants. Two speakers were required to memorize the sentences and corresponding pictures firstly, then took turns to ask/answer questions by only seeing the pictures. The linear mixed-effects model was used to make comparison among broad, contrastive and narrow focus conditions for F0, intensity and duration under the condition A and U.

Results and discussion  The current study found that both contrastive and narrow focus showed an on-focus F0 increase in condition A. However, statistical significance was only found when comparing the contrastive focus and the broad focus, reflected by the significantly increase of mean F0 and max F0. In the pre-focus position, mean intensity decrease was observed for both narrow and contrastive focus under the two accent conditions, but mean F0 lowered only under condition U. In the post-focus position, no significant compression of any acoustic cues was detected under the condition A and U, which was consistent with previous works (Lee & Xu, 2018). Focus did not significantly affect the duration among all the focus and accent conditions upon our measures. There were no statistically significant differences between the prosody of contrastive focus and narrow focus conditions from our analysis. However, narrow focus was realized mainly on the pre-focus lowering, while contrastive focus relied on both the pre-focus lowering and on-focus expansion. Besides, more acoustic cues existed in differentiating contrastive focus from broad focus than narrow vs broad focus. Thus, listeners may have more clues to distinguish contrastive focus sentences from broad focus ones. The present study was designed to evaluate the Japanese penultimate focus prosody in a more natural dialogue setting. However, further data collection is required because of the limitation of small sample sizes in this study. In addition, we will keep the number of morae same in all the sentence components and consider more accent combinations in coming studies.

References:
A constructional approach to Cantonese Ditransitive
Suet Ying Lam

Introduction There are three patterns of ditransitive constructions in Cantonese, differing in the existence of the dative marker bei and the order of the indirect and direct objects.

(1) Prepositional Object Construction (POC): V DO bei IO
Inverted Double Object Construction (IDOC): V DO IO
Double Object Construction (DOC): V IO DO

Previous research has taken a lexical semantics approach to analyse the semantic differences between the three constructions (e.g., Cheung 1972; Peyraube 1981; Tang 2003). Ditransitive verbs were categorized into classes based on the constructions they can fit. For example, Tang (2003) classified the verbs into five classes. Some classes are only possible in one construction, e.g., ‘ask’ verbs (including verbs of communication and losing) are only possible in DOC, while ‘fry’, ‘pluck’ and ‘send’ verbs are possible in POC.

Problems I argue that a lexical semantics approach cannot well capture the differences between the constructions for two reasons: First, verbs may be allowed in more than one construction when their direct object varies, showing that lexical meaning is not the only determining factor. For example, when the direct object of ‘teach’ is related to a skill (e.g., saan-sau), both POC and DOC are possible (Tang 2003).

Similarly, verbs within the same class can occur in different constructions if they tend to take different direct objects. Both gauu ‘teach’ and cyun-sau ‘pass on’ are verbs of knowledge acquisition, but ‘pass on’ prefers concrete direct objects like bai-kap ‘secret skills’ than ‘teach’. Thus, ‘pass on’ occurs more in POC. Although further categorization of verbs may solve this issue, a constructional approach can better capture the differences between the constructions.

Analysis The constructional approach views construction as a pairing of form and meaning (Goldberg 1995). Verbs are inserted into construction if their meanings are compatible with it. I argue that all three constructions carry the meaning of transfer, but they differ in the range of transfer. IDOC represents the most core sense of transfer, i.e., a realised transfer of possession. Taking a polysemous view, POC represents the less core and extended sense of transfer. Apart from the meaning of a realised transfer similar to DOC, it also represents a meaning of unrealised or expected transfer. For DOC, note that verbs of losing are not included in the analysis. This is because DOC carrying a deprivation meaning does not hold the same construction with DOC carrying a meaning of metaphor transfer. For example, topicalization of direct object is only possible with non-losing verbs:

(2) a. [Ni-tiu-tai], Ngo maan-gwo keoi e1 ‘This question, I have asked him’
   b. **[Ni-bun-syu], Ngo taau-zo keoi e1 ‘This book, I have stolen (from) him’

Thus, DOC represents events of further extended transfer, which involves no actual possession.

Peyraube (1983) has discussed one more construction in Cantonese, i.e., V bei IO DO. If the dative marker bei is covert, the surface structure of the construction will resemble DOC, resulting in a ‘pseudo-DOC’. Since the omission of bei in ‘V bei IO DO’ is optional, I treated it as the same construction as the ‘pseudo-DOC’. The lexical semantics approach barely discussed this structure, despite a difference between the meaning of this and the remaining constructions. Considering the difference, it should be included in the constructional approach. As this construction is only possible in verbs of giving like bei ‘give’ and sung ‘give as a present’, I argue this construction to carry an intermediate meaning of transfer, in between the meaning carried by IDOC and DOC.

The Cantonese ne1 Revisited: A Syntactic and Semantic Study on the Sentence-final Particle
Ka-Wing Chan

Keywords: Cantonese, sentence-final particles, cartography, ne

Background: One of the major questions of the Cantonese SFP ne1 is whether the particle provides [+Q] scope to a question, or marks the focalized element of the sentence. This issue is particularly crucial for the sketching of its cartographic syntax in the functional level, in which it may serve to unify further comparative analysis of SFPs. In this paper I adopt the clausal periphery of Tang (2020) and propose a syntactic position for ne1 based on its discourse functions and the results of various syntactic diagnostic tests. Essentially, I agree with Tang’s (2015) categorization that ne is an SFP of the focus type, because the question operator in the questions with ne1 comes from other elements. In addition, since questions that are formed by non-interrogative elements and ne1 should be the truncated form of wh-questions and A-not-A questions (Li 2006), I argue that the non-interrogative elements are underlyingly interrogative. As a result, the particle ne1 should have nothing to do with questions. However, the follow examples may arise one question: how many ne1 do we have in Cantonese?

(1) a. 提咗你嘅啦，係咪呢(*喺)?
Tai zo nei gaa laa hai mai ne ho
Remind ASP you SFP SFP be NEG SFP SFP
‘I have told you, see?’

b. 佢飲唔飲咖啡*(*喺)?
Keoi jam-m-jam gaafe ne ho
he drink-not-drink coffee SFP SFP
‘Does he drink coffee?’

(1a) shows that ne cannot co-occur with ho, although the position of the head of Focus must be fulfilled with ho following the *[focus ∅] Degree rule proposed by Tang (2020: 6).

Proposal: To answer the research question, this paper holds a conclusion that Cantonese is a language with one ne, and whether the Focus-Degree movement takes place subjects to the presence of focus in the sentence attached. Specifically, if the sentence does not have a focus to point at, ne will move from Focus to Degree to encode the speaker’s evaluation to the proposition. The major distinction between the two positions that ne can land is observed in the complementary distribution with different types of SFPs, followed by the presence of the focus-pointing function of ne in various syntactic environments.

References

Li, Boya. 2006. Chinese Final Particles and the Syntax of the Periphery. Utrecht: LOT.
Free Relative Clauses in Cantonese

May Pik Yu Chan

In addition to restrictive relatives, Cantonese has two types of free relative clauses (FRC): ‘ge3’ FRCs (1) have no overt wh-element and correlative FRCs (2) repeat ‘wh’ words that act like relative pronouns. Despite ‘ge3’ FRCs and correlative FRCs exhibiting differing surface forms, we show that they have similar structures, in that (i) both involve left-dislocation of the FRC, (ii) there is internal movement of an operator within the RC, and (iii) there are no condition-C effects under reconstruction.

(1) nei5 zung1ji3 ge3, ngo5 dou1 zung1ji3
you like ge3, 1.sg also like
‘Whatever you like, I like’ (ge3 free relative clause)

(2) nei5 zung1ji3 bin1 byun2 syu1, ngo5 zau6 maa5 bin1 byun2 syu1
you like what CL book 1.sg then buy what CL book
‘whatever book that you like, I will buy that book’ (correlative free relative clause)

‘ge3’ FRCs ‘ge3’ FRCs have no overt head, and ‘wh’ words are also not used. We argue based on its similarity with ‘ge3’ restrictive RCs that ‘ge3’ FRCs involve a silent head noun. In comparison to ‘ge3’ restricted RCs, when the FRC functions as an object it must be left-dislocated. We show that the dislocated RC and its argument position are related via movement based on two arguments. First, the fronting operation is sensitive to adjunct islands. Second, the subject-oriented reflexive zi6gei2 may precede its antecedent in the surface form of ‘ge3’ FRCs, suggesting that the reflexive has been in the c-command domain of its antecedent in the derivation (3). Furthermore, we find no condition-C effects under reconstruction. We test the internal structure of the dislocated RC using two tests. First, so2 in Cantonese, like suo3 in Mandarin, can only be used when there is movement of an object in the clause, and thus does not cooccur with resumptive pronouns (Huang et al. 2009). The grammaticality of so2 in ‘ge3’ FRCs in the relativization of accusative objects suggests movement within the FRC. Second, we show that movement across adjunct islands is also disallowed, also suggesting internal movement within the FRC (4). Lastly, as left dislocated ‘ge3’ restrictive RCs have similar distribution as their FRC counterparts, we argue that they have similar structures and differ only in overtess of the head and that FRCs have to be dislocated.

(3) [zi6gei2 vorj maa1mi4 zyu2 __ ge3 ()] k mui5 go3 siu2 pang4 jau5, dou1 zung1 ji3
Self mom cook __ ge3 every CL child also like sik6 __ k
eat
‘whatever their vorj mom cooks, every child, likes (to eat)’

(4) * John sik1 [[\_ zeon2 bei6 __ ge3 cu4 si1,1] ge3 ()], ngo5 dou1 sik6
John knows __ prepare __ ge chef ge I also eat
Intended: ‘Whatever X that John knows the chef who prepared, I'll eat’

Correlative FRCs Cantonese is one of few SVO languages that have correlative FRC structures. They differ from ‘ge3’ FRCs in that they (i) contain more than one instance of a ‘wh’ word, one of which acts as the relative pronoun, while the other marks the position in the main clause to which the FRC is related, (ii) the noun in ‘which’ phrases are overt in the RC and may optionally be repeated in the main clause, and (iii) ‘ge3’ is not used as a linker particle, though ‘zau6’ (‘then’) is often used (Matthews and Yip 2011). We show that correlative FRCs do not require grammatical relations of the relativized DPs to match. The relationship between the RC and its base position is tested using adjunct islands and the reflexive zi6gei2, showing that left dislocation of the RC also involves movement. Like ‘ge3’ FRCs, we find no violation of condition-C under reconstruction. Furthermore, we find evidence for movement inside the FRC based on sensitivity to adjunct islands. We thereby propose a similar analysis with ‘ge3’ FRCs, however a ‘wh’ operator moves covertly in place of the null operator.

Conclusion We show that ‘ge3’ FRCs and correlative FRCs both involve left dislocation of the RC and internal movement within the RC despite surface differences. Future work may consider how the RC in wh-correlatives is related to the main clause, how to account for the relationship between the two wh-elements to achieve the correct word order, and the relationship between nominalization and FRCs in other languages with adnominal markers.

Cantonese Relative Clause Processing
Kin Man Carmen Tang

Previous studies suggest that subject relative clauses are more common than their object counterparts in typology. However, there have been split views regarding the ease of processing of subject and object relative clauses, especially in the case of Chinese. The frequency-based account proposed that because subject relative clauses (SRs) are more frequent to occur among world languages, it is easier to process. The alternative working-memory-based account holds that the difficulty of processing depends on the information retained in working memory, as well as the distance between the head and its dependent (Gibson, 2000). While adopting a head-final parameter for noun phrase, Chinese might show a different pattern in processing. The allowance of NP-initial classifier might also make Cantonese RC processing worth studying. This study has taken into account the factors of Modification (i.e. whether the head noun is subject/object of matrix clause), Extraction (i.e. whether the head noun is originated from the embedded subject/object), and the combinations of these two factors produced 4 types of RCs: 1) subject-modifying subject-extracted RC (SSR); 2) subject-modifying object-extracted RC (SOR); 3) object-modifying subject-extracted RC (OSR) and 4) object-modifying object-extracted RC (OOR). 48 native Cantonese speakers were recruited to participate in an online self-paced reading experiment. The participants read 72 Cantonese sentences and answered comprehension questions.

Results. There is a significant effect of RC types on the accuracy of the comprehension questions (F(3, 1135.5)=3.833; p=.010), and the accuracy of SOR is significantly lower than that of SSR (p=.004). When examining the critical regions, namely the relativizer ge3 (嘅) and the head noun region, statistical differences were found. At the ge region, there is a marginally significant effect for RC type (F(3, 1124.6)=2.695; p=.045), where OOR was found to take more time to process than SSR (p=.079) and SOR (p=.073) respectively. At the head noun region, the effect of RC type was also found significant (F(3, 1122.9)=5.407; p=.001). The reading time for OOR at the head noun region was found significantly longer, when compared to SSR (p=.022) and SOR (p=.001) respectively. The longer reading time in the critical region for OOR and the lower accuracy rate for SOR may converge to reflect a processing difficulty of object-extracted RC in Cantonese, which does not align with Gibson’s prediction in Dependence Locality Theory.

Reference
香港粵語疑問和陳述語氣之聲學初探
——疑問詞、否定極項、句末助詞和句末語調

張凌（zhangl@eduhk.hk）、馮奕瑤
香港教育大學

香港粵語有複雜的聲調系統和豐富的句末助詞。聲調、語調和助詞的相互關係一直是學界關注的研究熱點。本文進行了初探實驗，探討香港粵語的疑問語氣和陳述語氣之聲學差異，設計了一系列目標句子，探討在這兩種語氣下兩個位置的韻律特征：

（一）句中位置，探討同形的疑問詞和否定極項，如（1）和（3）疑問句中的“乜嘢”是疑問詞，而（2）和（4）陳述句中的“乜嘢”是否定極項；

（二）句末位置，探討句末助詞和句末語調，如（1）和（2）句末音節為助詞 aa3，而（3）和（4）句末音節為實詞“菜”。

為使發音人能更自然地說出目標句子，在每個目標句子前我們都提供一個具體的日常生活場景和“熱身”的句子，如（5）所示，為（1）的完整題項。實驗邀請了以香港粵語為母語的 10 位男生和 10 位女生參加，在征求同意後於安靜的室內完成實驗並錄音。錄音事後用 Praat 軟件進行測量，測得各音節的語音參數 $f_0$ 及時長，並進行後續的數據分析。

實驗結果顯示，疑問句的整個音高要比陳述句高。疑問句中的疑問詞與陳述句的否定極項相比，首音節（如“乜”、“邊”）要比次音節（如“嘢”、“度”）的增高幅度更大。疑問句末的 aa3 要比陳述句末的 aa3 高，兩者都呈現水平略降的調形，只是疑問句末 aa3 平移抬高了。陳述句末的實詞音節（如“菜”、“過”）亦為水平略降的調形，而疑問句末的實詞音節則呈急劇上升的調形，且末端在各句中最高。在此實驗結果的基礎上，我們再進行聲調、語調和助詞的相互關係的探討。

（1）佢整咗啲乜嘢 aa3?
（2）佢都冇整乜嘢 aa3。
（3）佢整啲乜嘢菜?
（4）佢都冇整乜嘢菜。
（5）(家姐話阿妹整啲咗奇怪菜式，於是阿媽問：)
你唔好咁緊張啦。佢整啲乜嘢 aa3?
Quantification of Chinese henduo and henshao: An implication on the role of morpho-syntactic diversification in natural language quantification
Yueming Sun

It is well acknowledged that *many* and *few* can serve as an adjective or a determiner (both in the prenominal position), leading to an ambiguity between a modifier type and a quantifier type of expressions (see e.g. Bennett 1974, Westerståhl 1984, Löbner 1987). Partee (2004) further leads to the conclusion that *many*/*few* can be cardinal or proportional in reading, with the former as either an adjective or a determiner, and the latter a determiner only. For Chinese, equivalents to English *many* and *few* are considered to be *henduo* and *henshao*, and they are shown to demonstrate asymmetrical syntactic distributions (see Chao 1968, Zhu 1989, Wang 1995, Qiu 1999).

This study aims to probe into the quantification of *henduo* and *henshao*, and to discuss the role of morpho-syntactic diversification in determining their quantification. We argue that, unlike *many* and *few*, interpretations of *henduo* and *henshao* are not determined by a simple ambiguity between an attributive adjective and a determiner, but a diversification among an attributive adjective, a predicative adjective and an adverb, leading to their natural tendencies to cardinal readings and proportional readings. Our findings show the followings.

Firstly, morpho-syntactic diversifications of *henduo* and *henshao* are shown in their roles as the attributive adjective (see 1a), the predicative adjective (see 1b) and the adverb (see 1c).

(1) a. Henduo/henshao ren chi pingguo.  
   many/few people eat apple  
   ‘Many/Few people eat apple.’

   b. Ta chi de pingguo henduo/henshao.  
   he eat DE *many/few*  
   ‘The apple he ate are many/few.’

   c. Ta *henduo/henshao* chi pingguo.  
   he *many/few* eat apple  
   Intended: ‘He often/rarely eats apple.’

Secondly, it is found that different quantificational patterns of *henduo* and *henshao* can be predicted by their distinct morpho-syntactic properties. With *henduo* mainly serving as an attributive adjective or a predicative adjective, cardinal readings are more natural for *henduo*, with proportional readings restricted to cases where [*henduo* + NP] is licensed by the topic feature of [Head, TopicP], as in (2). Under such a case, *henduo* is of the quantifier type and [*henduo* + NP] forms a quantifier phrase (QP) which triggers the tripartite structure (Kamp 1981, Heim 1982, Partee 1995). Contrarily, with *henshao* mainly appearing as an adverb and a predicative adjective, the preference of proportional readings is possible in *henshao*.

(2) Henduo xuexiao lai-le jiazhang.  
   many school come-PERF parent  
   ‘There are many schools that parents came to.’

On the basis of the above, we argue that it is the primary function of *henduo* as an attributive adjective that supports its dominate cardinal readings. The restricted preference of proportional readings is possible with the topic projection in *henduo* and when it serves as the predicative adjective. In contrast, dominant cardinal readings on a par with *henduo* is not possible in *henshao*, for its restricted function of being the attributive adjective, and modification of *henshao* is possible only under adverbial modification. *Henduo* and *henshao* have revealed the impact of morpho-syntactic diversification in natural language quantification, and their restricted proportional readings may lead to an implication that Chinese may have determiners.
Epistemic and evidential modal construction *mai6…lo1* in Cantonese: a case of modal strengthening and weakening
Peppina Po-lun LEE
City University of Hong Kong

In recent years, debate in evidentiality and epistemic modality has been lying on the relation between the two, and how the occurrence of modals in different grammatical and lexical categories mark the relevant modal meanings (see e.g. Palmer 1986, Kratzer 1991, Crystal 1993, Izvorski 1997, de Haan 2001, Lazard 2001 and Aikehenvald 2004). This paper studies Cantonese evidential construction *mai6…lo1*. We argue that *mai6* is an inferential evidential and *lo1* is an evidential SFP expressing epistemic attitude of the speaker, with the two differentiated by one being a non-confirmative type of evidential and the other a confirmative type, as described below.

(1) *Mai6* and *lo1* as non-confirmative and confirmative types of evidentials
The interpretation of *mai6…lo1* is governed as follows:

a. *mai6*, as an evidential, which derives inference on the basis of common knowledge, established knowledge and source of information of the speaker, hence inferential evidentiality and as a weak epistemic modal of *possibility*; and

b. the speaker’s inference is strengthened by the confirmative evidential SFP *lo1*. *Lo1*, serving as a confirmative evidential, strengthens the speaker’s commitment to the truth-value of the presupposed proposition, hence conveying a strong form of epistemic modal of *necessity* in *lo1*.

Co-occurrence of evidential adverb *mai6* and SFP *lo1* represents the pairing of two type-matching modals varying in modal force, as shown in (2), while (3) gives a response with SFP *lo1* occurring alone.

Context: “The shop has 50% off”. (2) and (3) are possible responses of speaker A under such a context.

(2) A: Gam2 ngo5 *((mai6) daai3-ding6 gei2 go3 gip1 heoi3 lo1). such I MAI bring-in-advance several CL luggage go LO
‘As such, I will need to bring several pieces of luggage.’

(3) A: Gam2 ngo5 daai3 ding6 gei2-go3 gip1 heoi3 lo1. such I bring in-advance several-CL luggage go LO
‘As such, I will bring several pieces of luggage.’

(2) represents a case with *mai6* occurring with *lo1*. We argue that to avoid double realization of a single modality, modal SFPs, as the strong type of modals, are obligatory to trigger modal spread to the weak modal adverbs. Relevant modal force is therefore converted from possibility to necessity, resulting in modal strengthening, as shown in (4a).

(4) Modal strengthening and modal weakening of strong epistemic modal

a. Modal strengthening;
To avoid double realization of a single modality, a strong modal operator MOD1 that takes a proposition p as its argument is obligatory to trigger modal spread to the weak modal MOD2, i.e. converting p from a *possibility* to a *better possibility* or a *weak necessity*, iff modal-matching MOD1 and MOD2 co-exist in the same p, and MOD1 takes a wider scope over MOD2.
(3) represents the case when lo1 occurs alone. It represents a case of modal weakening, which forces modal SFPs to occur alone as single weak modals, as shown in (4b).

b. Modal weakening – modal SFP as a single modal SFP
MOD₁ would occur as a single weak modal with the same proposition p, iff no modal matching MOD₂ co-exists within the same p.

Generalizing, the co-occurrence of mai6 and lo1 reveals that Cantonese tends to have evidential adverbs occurring as non-confirmative type, and this is unlike evidential SFPs, which can be confirmative or non-confirmative type.

Selected references:
Acquisition of Noun-Modifying Clause Constructions across Bilingual Contexts

Mengyao Shang, Ziyin Mai, Stephen Matthews and Virginia Yip

This study investigated how children acquire Noun-Modifying Clause Constructions (NMCCs) in Mandarin across monolingual and heritage bilingual contexts where children received qualitatively and quantitatively different language exposure. NMCCs share some similarities with Relative Clauses (RCs) but are gapless, unlike typical RCs. Since the “gapless RC” was identified in Japanese, Chinese, Korean, etc., syntacticians have attempted to account for it but problems arise since the theoretical framework of RC analysis relied on the existence of a syntactic gap. Matsumoto (1997, 2017) proposed the frame-semantic approach to include both ‘gapless’ and traditional RCs as subtypes of NMCC. Linguists have reached the consensus that European RCs are construed based on filler-gap dependencies, but it remains controversial whether Chinese NMCCs are governed by syntactic operations or semantic-pragmatic constraints.

We used naturalistic speech data of 6 children from three longitudinal corpora: 2 monolingual Mandarin-speaking children from (1) Tong corpus (Deng & Yip 2018) and (2) Zhou2 corpus (Zhang & Zhou 2009), 4 heritage Chinese children from (3) Child Heritage Chinese Corpus (Mai, Matthews & Yip 2017). The general structure of NMCC is illustrated in (1).

(1) [Jia you] de ‘a car for adding fuel’ [[Clause] modifier de Noun] (Winston 3;05;10) The results showed that monolingual and heritage children are capable of producing different types of NMCCs around two years old despite their complex noun phrase structure. Null subjects were rarely found in RCs, while the rate of pro-drop was high in other types of NMCCs, suggesting that different restrictions might exist on different types of NMCCs. Alongside the monolingual data, by introducing heritage children into the analysis, the findings will make theoretical and empirical contributions to studies of heritage language as advocated by Polinsky and Scontras (2019).

Keywords
Noun-Modifying Clause Construction (NMCC), heritage Mandarin, Relative Clause (RC)
References


Object omission in heritage bilingual children’s language:  
A case study of Luna’s speech patterns in CHCC  
Yiling Hong

Object omission refers to the phenomenon of grammatical objects being used with transitive verbs which are assumed, but left unspoken. Allowances for null objects differ between languages. Bilingual children who use null objects in the dominant language vary from that of monolingual children. Previous research has studied object omission in Cantonese and English bilingual children. However, little research has been conducted in the study of object omission within heritage bilingualism.

This study addresses that gap by looking at the case of a heritage bilingual child, using audio transcripts from the Child Heritage Chinese Corpus (CHCC). CHCC shows the linguistic effects of Chinese as a heritage language on American-born Chinese children. The case examined in this study is Luna, who was born into a Chinese speaking household in an English-speaking country. She was first introduced to the societal majority language in nursery and preschool from the age of 9 months. By conducting child-friendly research exercises, researchers at CUHK recorded her speech between the ages of 3;10 to 4;11 via Skype at regular intervals.

Luna’s English shows a high frequency of missing objects consistent with transfer of Chinese corresponding structures; evidence can be found by drawing comparisons with controlled monolingual data.

An example of how Luna’s speech pattern varies in object omission is shown below:

(1) CHI: Anna, do you wanna [: want to] see my toys?

......

CHI: xxx I can’t see.

CHI: I want Anna.  
(Luna 4;03;07)

In this example, the missing object of the transitive verb see refers to Anna who is mentioned in the above conversation. This property suggests transfer from the child’s Chinese, as seen in the child’s utterance in (2):

(2) CHI: Wo3 kan4 bu2 dao4.

I see no

“I can’t see”  
(Luna 4;05;23)

The object of the verb kan4 ‘see’ is the cake candles present in the context but omitted in the child’s utterance.

This study first looks into the structures involved in (1)–(2). From there, it presents a contrastive analysis of object omission among monolingual and bilingual children, measuring frequency and looking for structural conditioning of the phenomenon. Quantitative and qualitative differences in children’s performance reflect cross-linguistic influence from heritage language in dominance. The results of this research will hopefully contribute to further discussion in the study of heritage bilingualism.

Keywords: object omission, CHCC, heritage bilingualism, Chinese-English bilingual children, cross-linguistic influence.
The Philippines features a diglossic linguistic environment where English is recognized as the prestigious international language along with Filipino/Tagalog, the national language, and Spanish, a vestigial language that remains in the hearts of the locals. Code-switching between these three languages often occurs especially during number-reading. Previous studies have focused on language perception in number reading based on mathematical word problems (e.g., Bernardo and Calleja, 2010). Evidence showed that participants solve arithmetic questions set in the preferred language of the participants more quickly and successfully. However, numbers exist outside the realm of mathematics. Given different social contexts and practices, how do multilingual speakers process and produce numbers differently?

The present study addresses the following issues based on the Frequency-Lag Hypothesis (Gollan et al., 2005; Gollan et al., 2008, Gollan et al., 2011), the Word-length Effect (Ellis and Hennelly, 1980), and the Bilingual Encoding-Complex Model (Bernardo, 2001;2002):

1. How do Filipino adults and children produce numbers? To what extent do they show different patterns?
2. Which language(s) do Filipino adults and children use for numbers in different contexts?
3. Which factors influence their linguistic choices when number-reading?

Two tasks were used to test Response Times and language choice with contextualized numbers (i.e., time and price). The first task showed that across age groups, both adult and children participants did much better in English than in Tagalog. They read aloud Arabic numerals more slowly in Tagalog. Difficulties in articulating Tagalog numbers were observed in both groups of participants but not in English.

The second task revealed that because of conditioning from frequent English code-switching, English is the primary language used to tell both time and price. Adult participants showed more instances of using Tagalog (for prices) and Spanish (for times). Children showed overwhelming dependence on English but showcased framing of the English number utterances with Tagalog or Spanish adverbial phrases for additional information.

The findings showed that English was the primary language with Tagalog and Spanish being secondary. Tagalog and Spanish often supplemented and framed the English choice with further information for the interlocutors. The results showed that identifying language fluency is complicated and number cognition and production are complex matters. Defining someone as “native speaker” of that language is insufficient. However, the data also shows a cultural affinity of languages spoken across generations.
The Use of Tone and Tonal Combination in Brand Names
Yoyo Pui Yiu Tsang\textsuperscript{1}, Jialin Zhang\textsuperscript{2}, Mingxing Li\textsuperscript{1}
\textsuperscript{1}Hong Kong Baptist University, \textsuperscript{2}Peking University Experimental School (Jiaxing)

High tones vs. low tones are observed to differ in their distribution across Chinese dialects, with a preference for high tones (Jiang 1999, Jiao 2013); high tones are also argued to be more likely to have association with particular meanings (Zhu 2004). For disyllabic sequences, compatible combinations (e.g., HL.LH) vs. non-compatible ones (e.g., HH.LH) (Xu 1994) are observed to differ in their difficulties in learning (Wong & Strange 2017). This study investigates the distribution of tones and their combinations in brand names, to examine if there is a dispreference for low tones and a preference for compatible tonal combinations.

A total of 122,480 disyllabic Chinese brand names, in the form of $\sigma_1\sigma_2$, were drawn from an online corpus (\textit{Company-Names-Corpus}). The tones of the syllables were transcribed into the Mandarin tones T1 (HH), T2 ( LH), T3 ( LL(H)) and T4 (HL). The occurrence rates of the four tones were then calculated separately for $\sigma_1$ and $\sigma_2$, which were compared with their chance levels, e.g., 25% (= 1/4) for T1 in $\sigma_1$. The rates of the 16 combinations (e.g., T1T2, T1T3, etc.) were calculated and compared respectively with their chance levels, e.g., 6.3% (= 1/16) of T1T1 over $\sigma_1\sigma_2$.

The results showed that (i) in $\sigma_1$ and $\sigma_2$ alike, the rates of T3 (LL(H)) are the lowest; (ii) in $\sigma_1$, the rates of T1 and T4, beginning with H, are higher than those of T2 and T3, beginning with L; in $\sigma_2$, the rates of T1 and T3 are lower than T2 and T4; (iii) in $\sigma_1\sigma_2$ sequences, compatible vs. non-compatible combinations have similar rates, with T4T2, T2T4, T1T4 the highest and T3T3 (which triggering the tone sandhi rule in Mandarin), T2T3, T3T1 the lowest.

The results in generally confirm the dispreference of low tones in brand names, but do not suggest a clear preference between compatible combinations and incompatible ones. On the other hand, there seem to be detailed tendencies for tones and tonal combinations in different contexts, which awaits further exploration.

\textbf{Keywords}: tone, tonal combination, brand name

\textbf{References}:
Vowel space warped in speaking through facial masks
Ting Zhang, Mosi He and Bin Li

Wearing facial masks has proved an effective measure of self-protection amid global pandemics. Masks, however, degrades speech signals. This study investigated whether and how facial masks affected speaking by examining changes in vowel properties. Formants of three Cantonese vowels (/aa/, /i/ and /u/) produced by adult native speakers of Hong Kong Cantonese were measured in conditions with and without a mask. Results showed that wearing surgical, KF94 masks and face shields led to different degrees of warping of vowel space compared with the area measure in no mask condition. Moreover, speaking through face shields yielded significantly smaller spaces than those in the other two masks. Previous studies on English reported larger vowel space areas under masks. The warped spaces of vowels under masks may be a result of higher speaking rate and lower intensity when speaking through masks. Differences in ours and previous studies also prompt further investigation to language-specific spectral properties of vowels.
The acoustic characteristics and perceived sexual orientation of Cantonese gay speech
Kwok Chung Lau

While gay speech has been largely investigated in western languages such as English, gay speech studies in the eastern languages are still limited. According to Gaudio (1994), Munson et al. (2006) and Sisson (2003), there were no significant differences in the mean F0 between English-speaking homosexual and heterosexual men. They, however, produced different F1 and F2 in English vowel /i/, /ɑ/, /ɛ/, /ɔ/, /u/ and /æ/ (Munson et al., 2006; Piccolo, 2008; Pierrehumbert et al., 2004; Rendall et al., 2008). Meanwhile, F1 and F2 may also be the acoustic cues that people use in the judgment of sexual orientation. (Cartei & Reby, 2012; Munson, 2007; Munson et al., 2006). This study sets out to examine the acoustic characteristics and perceived sexual orientation of Cantonese gay speech through production task and perception task.

In the production task, 10 Cantonese-speaking homosexual men and 10 Cantonese-speaking heterosexual men were invited to produce target Cantonese words that are embedded in a carrier phrase and their acoustic features (mean F0, F1, F2) of the target Cantonese words were measured. The acoustic analysis revealed that there was no significant difference in mean F0, F1 and F2 between Cantonese-speaking homosexual and heterosexual men. These results do not support the stereotype towards the gay community in Hong Kong, which gay speaks in a higher pitch.

In the perception task, 14 participants were asked to judge the sexual orientation of the speakers from the production task by rating on a scale from 1 (least gay) to 10 (most gay). The correlation test between the perceptual rating and each of the acoustic measurements (mean F0, F1, F2, and vowel duration) was conducted. There was only a significant positive correlation between perceptual rating and mean F0 (p<0.05). This suggested that Cantonese speakers judge someone’s sexual orientation based on mean F0 rather than F1, F2 and vowel duration.

The results in this study replicated the previous Cantonese gay speech study by Hau (2007), but this study provided some findings that Hau (2007) did not explore: (1) The speech between Cantonese-speaking homosexual and heterosexual men do not exist a difference in F1 and F2; (2) Cantonese-speaking people do not consider F1, F2 and vowel duration in their judgment on sexual orientation. Besides, the contradictions with gay speech studies in western languages from both production task and perception task in this study also suggested that the acoustic property in gay speech may be language specific.

Keywords: Gay speech; Cantonese; Acoustic analysis; Perceived sexual orientation
References


