Introduction to Ludlings and Related Phenomena

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1. General remarks

Language play phenomena, ranging from ludlings (or language games) to poetry and nursery rhymes, often involve rule-governed phonological operations that can be accounted for in principled ways. As such, they often hold implications for the sound patterns and phonological systems of languages. Ludlings and related phenomena thus sometimes emerge as a source of evidence in phonological debates on issues including, but not limited to, abstract underlying representations, phonotactics, syllable structure, feet, phonological processes, rule ordering, psychological reality of rules, and tonal melodies (Chomsky and Halle 1968; Yip 1982; McCarthy 1984; Ohala 1986; Davis 1994; Bagemihl 1995; Vaux 2011; and references therein). Despite their great relevance to phonology, however, these phenomena often fall out of the scope of mainstream linguistics literature. Few descriptive grammars, for example, touch on language play.

In this context, the Special Feature of the present volume brings together phonological studies that explore ludlings and related phenomena. This Special Feature arose from a two-day Grammatical Studies Workshop entitled "Language Games and Phonology," held in two parts on September 24, 2019, and January 24, 2020. The workshop, organized by ILCAA Core Project "Linguistic Dynamics Science 3," was held at the Research Institute for Languages and Cultures of Asia and Africa (ILCAA), Tokyo University of Foreign Studies (TUFS), Japan. Over the course of the workshop, eight linguists working on genetically, geographically, and typologically diverse languages gave presentations on ludlings and related phenomena in single languages or groups of closely related languages, with a special focus on phonology. These contributions culminated in a general discussion by all participants attending the workshop. Below, (1) and (2) summarize individual papers presented at the workshop; the presenters were invited to submit papers to the current Special Feature, and six papers are included (Nagaya and Uchihara; Ishizuka; Suzuki; Kurabe; Ueta; and Morokuma).

(1) Languages and topics discussed at the Grammatical Studies Workshop

Language	Family	Country	Topic	Author(s)
Atayalic	Austronesian	Taiwan	Ludling	Ochiai
Basque	Isolate	France	Ludling	Ishizuka
Jinghpaw	Sino-Tibetan	Myanmar	Ludling	Kurabe
Mongolian	Mongolic	Mongolia	Verse	Ueta
Quechua	Quechuan	Peru	Ideophone	Morokuma
Tagalog	Austronesian	Philippines	Ludling	Nagaya & Uchihara
Turkish	Turkic	Turkey	Ludling	Suzuki

(2) Authors and titles of papers presented at the Grammatical Studies Workshop

Naonori Nagaya & "Language Games and Phonology in Tagalog"
Hiroto Uchihara
Masayuki Ishizuka "Language Games and Phonology in Basque"
Yui Suzuki "Language Games and Phonology in Turkish"
Keita Kurabe "Ludlings and Syllable Structure in Jinghpaw"
Naoki Ueta "Rhythm of Mongolian Proverbs"
Yuko Morokuma "Language Games and Phonology in Quechua"
Izumi Ochiai "Camouflage by Affixation in Ata-yal-ic Languages"

As an introduction to the Special Feature, the remainder of Section 1 sets out to provide an overview of ludlings and related phenomena. This is followed by a general introduction to each contribution to the current Special Feature in Section 2.

Ludlings (from Latin *ludus* 'game' and *lingua* 'language') are a language play phenomenon whereby phonological forms of real words are systematically converted to language game words. The term was coined by Don Laycock in his seminal work of 1972 on typological surveys of language games in the world's languages. Ludlings are also known under the names of "secret language," "disguised speech," "play language," "word games," and "speech play." They are also called by various names in languages other than English; for example, they are known as the "bird language" in Turkish (Suzuki, this volume), and as "goat Spanish," "fake Basque," or "Gypsy language" in Basque (Ishizuka, this volume). As a special register, ludlings often have a socio-cultural function of disguising what the speaker is saying to facilitate private, playful, and exclusive communication within a group of people acquainted with the system. They may be practiced by children or younger speakers (Nagaya and Uchihara; Kurabe, this volume), adults (Ishizuka, this volume), or both (Suzuki, this volume). Example (3) illustrates Pig Latin or "Igpay Atinlay," an English ludling, where the word-initial consonant or cluster of real words is moved to the end and then suffixed by a meaningless -ay:

(3) English Pig Latin

pig > igpay star > arstay latin > atinlay banana > ananabay

Laycock (1972) and subsequent studies show that ludlings often involve one or more of the four mechanisms of insertion, rearrangement, substitution, and deletion (Laycock 1972; Davis 1994; Bagemihl 1995). Insertion is a typologically common ludling mechanism whereby a phoneme or a string of phonemes is inserted into some part(s) of real words. The typological literature shows that insertion games often involve bilabial consonants as part of the inserted string; this is illustrated in the following Basque examples, which insert *Vp* before every syllable nucleus in real words (see Ishizuka, this volume):

(4) Iterative infixal ludling in Basque

ʻI' > nipi ni 'train' tren > trepen 'how many' zonbat zoponbapat > amodioa > apamopodipiopoapa 'love'

Insertion is also found in Turkish, where various types of meaningless sequences, such as -gV, -cV, -pc, -skV, and -htVbVtV, are iteratively inserted after every vowel (5a). Turkish also exhibits rich examples of other insertion-type ludlings, including those that insert a meaningless sequence -(e)bir after every segment in a word (5b), those that insert words such as kutu 'box' before every syllable (5c), and those that insert bayrum after every word (5d):

(5) Iterative infixal ludling in Turkish (Suzuki, this volume)

```
a. seni > segenigi 'you'
b. seni > sebirebirnebiribir 'you'
c. seni > kutusekutuni 'you'
d. seni > senibayrım 'you'
```

Tagalog, which is known for its rich examples of ludling phenomena, also makes use of insertion. This is illustrated for instance by the "G-word" ludling, whereby a phonological string -Vg is iteratively inserted after every syllable onset, as illustrated by the following examples (see Nagaya and Uchihara, this volume):

(6) G-words in Tagalog

```
sa
          >
               sagá
                              'LOC'
síno
          >
               sigínogó
                              'who'
mahál
              magáhagál
                              'expensive'
          >
                              'plate'
pláto
          >
               plagátogó
```

Rearrangement is another common ludling mechanism; it derives words by rearranging part of the real word. *Baligtad* or backwards language in Tagalog illustrates rearrangement, deriving ludling words by syllable interchange. Rearrangement in Tagalog can also be manifested by a complete reversal of phonemes (as in 'explode' and 'idol' below). Some examples ('hardness' and 'explode' below) undergo semantic change in the backwards language (Nagaya and Uchihara, this volume):

(7) Backwards language in Tagalog

```
'father'
pater
                           erpat
                                      'father'
        'hardness'
                                      'cool'
tigas
                     >
                           astig
        'explode'
                                      'drunk'
sabog
                     >
                           gobas
        'idol'
                                      'idol'
idol
                     >
                           lodi
```

Turkish also exhibits rearrangement-type ludlings. One type exchanges the first and last consonants of monosyllabic words; when the input consists of more than one syllable, the game moves the first syllable to the end. In another type of Turkish rearrangement game, words are read backwards as in Tagalog (see Suzuki, this volume):

(8) Backwards language in Turkish

```
ben > neb 'I'
seni > nise 'you'
seni > ines 'you'
seviyorum > muroyives 'like'
```

Substitution, which is typologically less common, replaces a part of a real word with one or more specific phonemes. A substitution game in Jinghpaw takes the rhyme as the target of application, where both simple and complex rhymes are systematically replaced by other rhymes such as *oy* (see Kurabe, this volume):

(9) Rhyme substitution game in Jinghpaw

```
      sa
      > soy
      'go'

      pru
      > proy
      'come out'

      nay
      > noy
      'I'

      khom
      > khoy
      'walk'
```

Deletion, the least common mechanism that ludlings make use of, involves deletion of some parts of real words. This is illustrated by the following examples from Javanese. (Glosses are added based on Robson and Wibisono 2002.)

(10) Deletion game in Javanese (Laycock 1972: 77)

```
trasi > si 'fish paste'
bakar > kar 'cooked by roasting'
gosong > sung 'burnt'
pinggir > gir 'edge'
```

Typological studies show that ludlings often combine one or more of the four mechanism types outlined above. This can be illustrated by the syllable copying game in Jinghpaw, which inserts a copy of the preceding syllable after every syllable boundary and then substitutes the onset of the copied syllable with a voiceless fricative /s/, as illustrated by the following examples (see Kurabe, this volume):

(11) Syllable copying game in Jinghpaw

```
      yú
      > yú-sú
      'rat'

      lum
      > lum-sum
      'warm'

      gùmrà
      > gùm-sùm-rà-sà
      'horse'

      ciŋkha
      > ciŋ-siŋ-kha-sa
      'gate'
```

Aesthetic expressions such as poems and songs also belong to the domain of language plays. They often exhibit phonological parallelism, as manifested in the metrical strategy of versification in Jinghpaw, which makes use of rhyming and syllable counting to embody and enhance phonological parallelism (Kurabe, this volume). Phonological parallelism is also illustrated by Mongolian proverbs. They usually take the form of a couplet, where the beginning of each line is characterized by means of alliteration. Mongolian proverbs often exhibit semantic parallelism as well, through repetition and iteration of the same or semantically paired words (see Ueta, this volume).

(12) Mongolian proverb

```
a.w-a-x xuŋ bo.xii-x
get-EV-FP person bow-FP
o.g-o-x xuŋ ge.dii-x
give-EV-FP person lean backwards-FP
```

Ideophones are another phenomenon that often involves repetition and iteration in order to convey expressive meanings. Sometimes characterized as being "more like poetic performances than prosaic descriptions" (Dingemanse 2015: 947), ideophones lie at the boundary between grammar and language play. Southern Quechua, like neighboring languages of South America, illustrates rich examples of ideophones, some of which exhibit verbal morphosyntax coupled with depictive semantics (see Morokuma's contribution).

(13) Quadrisyllabic ideophones in Ayacucho Quechua

llipipipi 'twinkle, sparkle'

katatata 'shiver by the cold or horror' phusususu 'make a noise of fermentation'

sallallalla 'make a noise of stones or the earthquake'

2. Scope of this Special Feature

The present special volume features six phonological studies on ludlings and related phenomena. Four papers put special focus on ludlings, one on rhythmic phenomena in proverbs, and one on ideophones. The assembled papers showcase the richness and diversity of language play in human languages. Each contribution also demonstrates that ludlings and related phenomena, although often marginalized in the mainstream literature, provide great insight into the sound pattern of the language of interest.

In "Ludlings and Phonology in Tagalog," Naonori Nagaya and Hiroto Uchihara explore Tagalog phonology with a special focus on the G-word ludling, which can be best analyzed as an iterative infixal ludling that inserts -Vg after every syllable onset. Nagaya and Uchihara show that the ludling reveals two hidden constraints in Tagalog phonology that would otherwise be difficult to observe: *gVgV and iambic stress. The ban against gVgV in G-words is consistent with the distributional asymmetry in the lexicon by which $(C_iVC_iV)\omega$ is dispreferred, and can be seen as one manifestation of the Obligatory Contour Principle. Nagaya and Uchihara also suggest that G-words, which produce an iambic rhythm, illustrate the possible emergence of the disyllabic "perfect prosodic word" in which one foot constitutes one phonological word. Nagaya and Uchihara's paper concludes that

^{&#}x27;Receiver becomes polite, giver becomes arrogant.'

the G-word ludling in Tagalog offers a case study that illustrates the value of ludlings as an important source of evidence in phonology.

The next paper, "Ludlings and Glides in Basque" by Masayuki Ishizuka, explores questions related to the phonological configuration of glides in Basque. Ishizuka shows that some glides in the language are part of the onset, while others are part of the nucleus, based on a set of ludlings. The ludling iteratively inserts the sequence Vp before every syllable nucleus, where V is a copy of the following vowel. The ludling manipulates the glides [j] and [w] in rising vocoid sequences differently. Based on this fact, Ishizuka suggests that the two glides occupy different positions within syllables: the former belongs to the onset while the latter belongs to the nucleus. Ishizuka's paper concludes that ludlings can be exploited as a source of evidence to demonstrate variation in glide representation not only among speakers but also system internally.

In the third paper, "Prosody of Iterative Infixal Ludlings in Turkish," Yui Suzuki investigates with a special focus on prosody a type of iterative infixal ludling in Turkish, where a phonological string -gV is inserted after every vowel in actual words. Suzuki examines the prosodic pattern of -gV ludling in terms of pitch and duration. With regard to pitch, the ludling deletes the tonal pattern of the input and then assigns a falling and a rising contour to the source and the inserted syllable, respectively. In terms of duration, Suzuki shows that the vowel of the source syllable is shorter than that of the inserted syllable. Suzuki concludes that the iterative infixal ludling in the language yields an iambic foot, which suggests the existence of the foot as a prosodic constituent in Turkish phonology.

In the fourth paper, "Ludlings and Their Implications for Syllable Structure in Jinghpaw," Keita Kurabe explores ludlings in Jinghpaw, asking how they can shed light on syllable structure in the language. Kurabe shows that ludlings can serve as evidence for or against particular empirical questions related to syllable structure, since they can be described on the basis of syllables or of subsyllabic constituents as the pertinent reference unit. Kurabe explores four types of questions: the phonological configuration of a certain ambiguous phonetic diphthong; the hierarchical organization within the syllable; the psychological reality of the syllable; and the syllable affiliation of the nasal component in word-initial NC (nasal-consonant) sequences. Kurabe's paper concludes that the findings reached through ludlings are consistent with other types of linguistic evidence in the language.

The fifth paper, "Rhythm in Mongolian Proverbs: Functions of Syllables and Morae" by Naoki Ueta, investigates the relevance of syllables and morae to Mongolian phonology, with a special focus on the rhythmic phenomenon in Mongolian proverbs, an area that has gained little attention in prior studies. Based on statistical analysis, Ueta shows that morae, but not syllables or other subsyllabic constituents, function as a phonological unit that plays an important rhythmic role in alliteration in Mongolian proverbs. Ueta also suggests the possibility that syllables, but not morae, play a weak role in creating phonological

parallelism in proverbs, where a certain number of syllables are arranged between the first and second line. Ueta concludes that morae and syllables are not alternatives to one another, but both play important roles in Mongolian phonology.

In the final paper, "On the Markedness of Southern Quechuan Quadrisyllabic Ideophones," Yuko Morokuma explores quadrisyllabic ideophones in Southern Quechua with a special focus on phonology. Quadrisyllabic ideophones in the language are a marked class of sensory words that have verbal morphosyntax and depictive semantics. In terms of phonology, quadrisyllabic ideophones show limited use of phonemes, quadrisyllabic structure, and triple repetition of the same syllable. Morokuma shows that these features are peculiar phonological features, which are uncommon in ordinary words. Although they exhibit unusual sound patterns, Morokuma also points out that quadrisyllabic ideophones do not violate phonological rules in Southern Quechua. Morokuma concludes that the phonology of quadrisyllabic ideophones is special, yet does not deviate from the general rules (Due to editorial issues, Morokuma's paper will be published as an addendum in *Asian and African Language and Linguistics* 16).

It is our hope that the current Special Feature will help bring about more studies on language play phenomena so that our knowledge of this complex but fascinating area as represented in the linguistics literature can continue to grow, covering both major and minor languages of the world.

References

Bagemihl, Bruce. 1995. "Language games and related areas". In John Goldsmith (ed.) *The Handbook of Phonological Theory*. Oxford: Basil Blackwell. pp.697–712.

Chomsky, Noam and Morris Halle. 1968. The Sound Pattern of English. New York: Harper & Row.

Davis, Stuart. 1994. "Language games". In Ronald E. Asher and James M. Y. Simpson (eds.) *Encyclopedia of Language and Linguistics*. Oxford and New York: Pergamon Press. pp.1980–1985.

Dingemanse, Mark. 2015. "Ideophones and reduplication: Depiction, description, and the interpretation of repeated talk in discourse". *Studies in Language* 39(4), pp.946–970.

Laycock, Don. 1972. "Towards a typology of ludlings, or play-languages". Language Communications 6. pp.61-113.

McCarthy, John. 1984. "Speech disguise and phonological representation in Amharic". In Harry van der Hulst and Norval Smith (eds.) *Advances in Nonlinear Phonology*. Dordrecht: Foris. pp.305–312.

Ohala, John J. 1986. "Consumer's guide to evidence in phonology". Phonology Yearbook 3. pp.3-26.

Robson, Stuart and Singgih Wibisono. 2002. Javanese-English Dictionary. Hong Kong: Periplus Editions.

Vaux, Bert. 2011. "Language games". In John Goldsmith, Jason Riggle, and Alan C. L. Yu (eds.) The Handbook of Phonological Theory. Second edition. Malden, MA: Wiley-Blackwell. pp.722–750.

Yip, Moira. 1982. "Reduplication and C-V skeleta in Chinese secret languages". Linguistic Inquiry 13. pp.637-661.