Moras and Syllables in Japanese Dialects[*]

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1. Introduction

(1) Two major questions concerning syllable structure in general

    a. What constitutes diphthongs, or tautosyllabic vowel sequences?

       e.g. /ai/, /au/, /oi/, /oe/, etc.

    b. Do superheavy (trimoraic) syllables exist?

      Both questions hinge crucially on the question of what constitutes syllables, i.e. how we can define the syllable and syllable boundaries in the language. This is a difficult question to answer in Japanese phonetics/phonology, because most Japanese dialects are 'mora(-counting) dialects' (McCawley 1978), where the mora plays predominant roles. Native speakers of the language have little native intuition about the 'syllable' and, moreover, little is known about syllable's roles in Japanese dialects (cf. Kawahara 2016).

(2) Three possibilities for /rain/ 'line, Rhine'

    a. One syllable: /rain/

    b. Two syllables: /ra.in/ or /rai.n/

    c. Three syllables: /ra.i.n/

      However, it is possible to address the two questions in (1) by carefully examining syllable's roles in each dialect and using this knowledge to examine the syllable structure in each system.

(3) Two questions to be addressed in this talk

    a. How are the pitch accent systems of Japanese dialects sensitive to the syllable and syllable boundaries?

    b. To what extent are superheavy syllables permitted in each system?

     (c. What constitute diphthongs in each system?—to be discussed in 2017)

(4) Potential 'superheavy syllables' in Japanese (mostly loanwords and compounds)
    a. /ViVjN/ **sain** 'sign', su**pein** 'Spain', **koin** 'coin', **tsuin** 'twin', ku**raun** 'crown'
    b. /ViVjC/ **oik**ko 'nephew', san**doit**chi 'sandwich', **hois**suru 'whistle'
            gen**daik**ko 'children of the new generation'
    c. /ViViN/ **roon** 'loan', rin**kaan** 'Lincoln', hari**keen** 'hurricane'
    d. /ViViC/ **koot**ta 'frozen', **toot**ta 'to pass (past tense), suki**toot**ta 'transparent'
            too**kyook**ko 'Tokyoite'
    e. /VNC/ ron**donk**ko 'Londoner'
    f. /ViViVj/ **booi** 'boy', **ooi** 'cover'

(5) 'superheavy syllable' test
    Which accent pattern do these trimoraic sequences take?
    a. Same as /ba.na.na/ 'banana' (Lignt-Light-Light)?
    b. Same as /pan.da/ 'panda' (Heavy-Light)?
    c. Same as /ru.pan/ 'Lupin' (Light-Heavy)?
    d. Different from all of these

(6) Organization of this talk
    1. Introduction
    2. Tokyo Japanese
    3. Kagoshima Japanese
    4. Three pitch accent systems in Koshikijima Japanese (KJ)—see the maps (last page).
      a. KJ-Taira
      b. KJ-Teuchi
      c. KJ-Kuwanoura

2. Tokyo Japanese
(7) Phonological evidence against superheavy syllables (Kubozono 1999, 2015a,b)
    a. Antigemination: /katto/ 'cut' vs. /kaato/ 'cart'
    b. Pre-nasal vowel shortening: /su<u>ten</u>resu/, */su<u>tein</u>resu/ 'stainless'
    c. **Accent: compound accent rule, antepenultimate accent rule,…**
    d. *Kattobasee* **test**
    e. *Zuuja-go* reversal word game (?)
    f. 'initial lowering' test (?)...

(8) Compound accent rule: place an accent on the final *syllable* of N1 if N2 is up to two moras (McCawley 1968). A sudden pitch fall occurs immediately after the head mora of the syllable.
    e.g. su.mi.<u>da'</u>-ga.wa 'Sumida River'
       a.ma.<u>zo'n</u>-ga.wa 'Amazon River'

(9) Accent test on superheavy syllables (Kubozono 2015a, b, in press)

    a. /aiN/: ra'in + kawa' → ra.i'n-ga.wa, *ra'in-ga.wa 'Rhine River'

    b. /eiN/: supe'in + kaze → su.pe.i'n-ka.ze, *su.pe'in-ka.ze 'Spanish Flu'

    c. /auN/: ta'un + shi → ta.u'n.shi, *ta'un-shi 'local magazine'

    d. /aiC/: ge'ndai + ko → gen.da.i'k-ko, *gen.da'ik-ko 'children of the new generation'

       cf. ha'ir(u) + ta → ha'it-ta 'to enter (past)'

    e. /oiC/: san.do.i't.chi, *san.do'it.chi 'sandwich'

          ho.i's.su.ru, *ho'is.su.ru 'whistle'

    f. /VNC/: ro'ndon + ko → ron.do.n'k-ko, ??ron.do'nk-ko 'Londoner'

    g. /ViViN/: rinka'an + ha'i →rin.ka.a'n-hai~rin.ka'an-hai, ?rin.kaa.n'-hai 'Lincoln Cup'

    h. /ViViC/: to'o.r(u) + ta → **to'ot**.ta 'to pass (past)'

            cf. tookyookko (unaccented) 'Tokyoite'

(10) *Kattobasee* chanting (Tanaka 1999)

    a. Baseball chanting: /*kattobasee XXX* (player's name) ! / 'Hit a homerun, XXX'

    b. Rule 1: If the name consists of three moras, link each mora to *X*.

       i-to-o 'Ito', ju-n-ko 'Junko', shi-ge-to 'Shigeto', ha-ru-o 'Haruo'

    c. Rule 2: If the name is four moras long or longer, link its last *syllable* to the third *X*.

    d. ku-bo.zo-**no**, ka-wa.ha-**ra**, na-ga.shi-**ma**, ma.ku.do-na.ru-**do** 'McDonald'

    e. i-chi-**roo** 'Ichiro', a-a-**min** 'Armin', me-su-**taa** 'Mester'

(11) *Kattobasee* test of 'superheavy syllables' (Kubozono 2015a,b)

    a. ain—shu.ta—**in**, *ain—shu—tain, *ai—nshu—tain, *ainshu—tai—n 'Einstein'

    b. su—pe—**in**~ ?su—pei—**n**, *su—u—pein 'Spain'

    c. de—za—**in** ~ ?de—zai—**n**, *de—e—zain 'design'

    d. kya—ro.ra—**in** ~ ?kya.ro—rai—**n**, *kya—ro—rain 'Caroline'

    e. rin—kaa—**n** ~ ri—n—**kaan**, *ri—n.ka—an 'Lincoln'

(12) Summary (Tokyo Japanese)

    a. /V_iV_jN/ , /V_iV_jC/ and /VNC/ almost always behave as two syllables: /$V_i + V_jN$/, /$V_i + V_jN$/, /V+NC/.[1]

    b. /ai/, /oi/ and /ui/ generally form diphthongs in this system (Kubozono 2015a), but they split into two syllables when followed by a coda consonant.

    c. /V_iV_iN/ seems to show the same behavior, i.e. /V_i+V_iN/, but it may occasionally behave like a superheavy syllable, /V_iV_iN/.

    d. /ViViC/ allows a monosyllabic accent pattern.

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[1] In Japanese, heavy-light disyllables are generally favored, while light-heavy disyllables are disfavored—e.g. loanword truncations (Ito 1990), *zuuja-go* formation (Ito et al. 1996), motherese and sound changes (Kubozono 2003). In the case under discussion, however, light-heavy (e.g. /a.in/, /ka.an/, /do.nk/) forms a better prosodic structure than heavy-light (e.g. /ai.n/, /kaa.n/, /don.k/) because having the least sonorant segment in the sequence as the syllable nucleus is a bad syllabification cross-linguistically.

3. Kagoshima Japanese

(13) Two accent types (capital letters=H tone) (Hirayama 1951, Kubozono 2004)

    a. Type A: High tone on the penultimate *syllable*.

         e.g. a.ka.SHIN.goo 'red signal'

            a.ka.shin.GOO-ga 'red signal-NOM'

    b. Type B: High tone on the final *syllable*.

         e.g. a.o.shin.GOO 'green signal'

            a.o.shin.goo-GA 'green signal-NOM'

(14) /ViVjN/ → 2 syllables $(1\mu+2\mu)^2$ (Kubozono 2004, 2015a,b)

    a. /ain/ RA.in 'line, Rhine'

           ra.IN-ga, *RAIN-ga 'line/Rhine-NOM'

           de.ZA.in, *DE.zain 'design'

    b. /ein/ su.PE.in, *SU.pein 'Spain';

           su.pe.IN-jin, *su.PEIN.jin 'Spaniard'

    c. /oin/ KO.in 'coin'

           ko.IN-shoo, *KOIN-shoo 'coin dealer'

           po.IN.to, *POIN.to 'point'

    d. /uin/ TSU.in 'twin'

           tsu.IN-ga, *TSUIN-ga 'twin-NOM'

           ku.IN.bii, *KUIN.bii 'queen bee'

           u.IN.naa, *UIN.naa 'Wiener sausage'

    e. /aun/ ku.RA.un, *KU.raun 'crown'

           a.na.UN.su, *a.NAUN.su 'announce'

           a.na.UN.saa, *a.NAUN.saa 'announcer'

(15) Other trimoraic sequences → 2 syllables $(1\mu+2\mu)$

    a. /ViViN/

        rin.KA.an ~ RIN.kan, ?RIN.kaan 'Lincoln'

        rin.ka.AN-hai 'Lincoln Cup'

        juu.ta.ku.RO.on 'housing loan, mortgage'

    b. /VNC/

        ron.do.NK.ko, ?*ron.DONK.ko 'Londoner'

    c. /ViVjC/

        /aiC/ gen.da.IK.ko, *gen.DAIK.ko 'children of the new generation'

        /oiC/ o.IK.ko, *OIK.ko 'nephew',

           san.do.IT.chi, *san.DOIT.chi 'sandwich'

    d. /ViViC/

        su.ki.to.<u>OT</u>.ta 'transparent'— su.ki.<u>TOO</u>.ru 'to become transparent'

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2 We only present Type A data here, but the same results are obtained from Type B words.

ko.<u>OT</u>.ta 'frozen'— <u>KOO</u>.ru 'to freeze'
　　　o.<u>OT</u>.ta 'covered'— <u>OO</u>.u 'to cover'

(16)　/ViViVj/ → 2 syllables (**2μ**+**1μ**)
　　　BOO.i 'boy', boo.I-ga 'boy-NOM'
　　　OO.i, *O.oi, 'cover'; oo.I-ga, *OOI-ga, *o.OI-ga 'cover-NOM'

(17)　Summary (Kagoshima Japanese)
　　　a.　Superheavy syllables are strictly prohibited in this system.
　　　b.　Three-mora sequences that appear to form superheavy syllables actually function as a sequence of two syllables, i.e. a light syllable + a heavy one.
　　　c.　The only exception is /ViViVj/ (e.g. /booi/ 'boy'), which exceptionally behaves like a Heavy+Light disyllable.

4.　Koshikijima Japanese

4.1.　Outline of KJ (Kamimura 1937, 1941; Kubozono 2010, 2012a,b, 2016)

(18)　a. Spoken on the Koshikijima Islands (north, central, and south), about 40 km to the west of the mainland of Kagoshima, Kyushu (see the maps on the last page).
　　　b. About 3,000 native speakers (population: 5,500)
　　　c. Two-pattern accent systems like Kagoshima and Nagasaki Japanese
　　　d. Mora-counting systems (i.e. moraic version of Kagoshima Japanese)
　　　　Type A: H tone on the penultimate *mora*
　　　　　A.me 'candy', o.NA.go 'woman', ba.REe 'volleyball', ru.PAn 'Lupin', po.PAi 'Popeye'
　　　　Type B: H tone on the final *mora*
　　　　　a.ME 'rain', o.to.KO~O.to.KO 'man'
　　　e. Remarkable regional differences among the villages.

(19)　Regional differences (Kubozono 2016)
　　　a.　KJ dialects generally permit two H tones in three-mora or longer words, whereas KJ-Taira permits only one H tone just like Kagoshima Japanese.
　　　　　e.g. (KJ-Taira) /o.to.KO/ vs. (KJ-Teuchi, etc.) /O.to.KO/ 'man'
　　　b.　Different dialects are sensitive to the syllable in different ways and to different degrees.

4.2.　KJ-Taira (ca 200-250 native speakers)

(20)　Basic patterns
　　　a.　Only one H tone per word:
　　　　　(Type A) H on the penultimate *mora*.
　　　　　(Type B) H on the final *mora*.
　　　b.　**H tone sreading:** If the H tone is assigned to a non-head mora, **it spreads to the head mora of the same syllable** in both Type A and Type B.

(21) H tone spreading (cf. Hyman 2007)

    a. 'rising contour tone'   b.
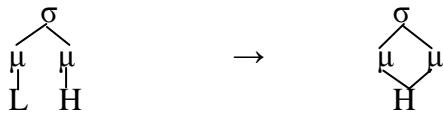
(22) Examples

    a. Type A (H tone on the penultimate mora)

        *paN.tu → PAN.tu 'pants'

        *puU.ru → PUU.ru 'swimming pool'

        *ra.I.to → RAI.to 'light, right'

         cf. ba.NA.na 'banana', ba.REe 'volleyball', ru.PAN 'Lupin'

    b. Type B (H tone on the final mora)

        *iN → IN 'dog (colloquial)'

        *mi.kaN → mi.KAN 'orange'

        *sen.seI → sen.SEI 'teacher'

         cf. i.NU 'dog', o.to.KO 'man'

(23) /ViVjN/, /ViVjC/, /VNC/ → 2 syllables (1μ+2μ)

    a. /ain/   sa.In 'sign'; sa.IN-ga, *SAIN-ga 'sign-NOM'

                ba.ren.ta.In 'Valentine', ba.ren.ta.IN-ga 'Valentine-NOM'

    b. /oin/   ko.In 'coin', ko.IN-ga 'coin-NOM'

                 saa.ro.In 'sirloin', saa.ro.IN-ga 'sirloin-NOM'

    c. /uin/   tsu.In 'twin', tsu.IN-ga 'twin-NOM'

    d. /ein/   su.pe.In 'Spain', su.pe.IN-ga 'Spain-NOM'

    e. /aun/   bu.ra.Un 'brown'; a.na.UN.su, *a.NAUN.su 'announce'

    f. /aiC/   gen.da.IK.ko, *gen.DAIK.ko 'children of the new generation'

    g. /oiC/   san.do.IT.chi, *san.DOIT.chi 'sandwich'

                 o.IK.ko, *OIK.ko 'nephew'

    h. /VNC/ ron.do.NK.ko, *ron.DONK.ko 'Londoner'

(24) /ViViN/ → 2 syllables (1μ+2μ) (~1 syllable)

      a. ro.On (~ ROOn) 'loan'; ro.ON-ga (~ROON-ga), *roo.N-ga 'loan-NOM'

      b. che.En (~ CHEEn) 'chain'; che.EN-ga (~CHEEN-ga), *chee.N-ga 'chain-NOM'

      c. ha.ri.ke.En, ?ha.ri.KEE.n 'hurricane'

        ha.ri.ke.EN-ga, *ha.ri.KEEN-ga, *ha.ri.kee.N-ga, 'hurricane-NOM'

      d. rin.ka.An, *rin.KAA.n 'Lincoln'

        rin.ka.AN-ga, *rin.KAAN-ga 'Lincoln-NOM'

      e. juu.ta.ku-ro.ON-ga, *juu.ta.ku-ROON-ga 'housing loan-NOM'

(25) Summary (KJ-Taira)

    a. As in Kagoshima Japanese, potential superheavy syllables usually split into two syllables, irrespective of their structure: /Vi+VjN/, /Vi+VjC/, /Vi+ViN/, /V+NC/.[3]

    b. /ViViN/ marginally permits a monosyllabic pattern, too. However, it never splits into /ViVi+N/.

**4.3. KJ-Teuchi** (700 native speakers; Kubozono 2012a,b, 2015b)

(26) Two H tones in relatively long words, both assigned from the right edge of the word.

    Type A ($H_1L_1H_2L_2$): KA.ma.BO.ko 'boiled fish paste',

                   NA.TU.ya.SU.mi 'summer holiday'

    Type B ($H_1L_1H_2$): O.to.KO 'man',

                 A.SA.ga.O 'morning glory (flower)',

                 HA.RU.YA.su.MI 'spring holiday'

(27) Two roles of the syllable

    a. **H2 shift** in Type A: H tone assigned to a non-head mora *shifts* to the head mora of the same syllable (i.e. only the head mora is H).
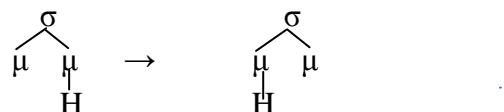
    b. **H1 and H2 are separated by one low-toned** *syllable*.

        Type A: KE.da.MOn 'wild animal'

                KE.DA.mon-KA.ra 'from (the) wild animal'

                KA.ZA.<u>ri</u>.MOn 'decoration'

                KA.<u>zai</u>.MOn 'decoration (colloquial)'

        Type B: SEN.seI 'teacher'

                SEN.sei-GA 'teacher-NOM'

                SEN.SEI-ka.RA 'from (the) teacher'

(28) H2 shift

    a. Type A

        *paN.tu → PAn.tu 'pants, underwear'

        *puU.ru → PUu.ru 'swimming pool'

    b. Type B (no H tone shift)[4]

        iN → *In 'dog'

        MI.kaN → *mi.KAn 'orange'

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[3] The behavior of /ViViC/ and /ViViVj/ is to be confirmed.

[4] H2 shift is blocked in Type B words since it would neutralize the two accent patterns (Kubozono 2012a, b).

(29) /ViVjN/ → 2 syllables (1μ+2μ)
    a. /ain/   <u>sa.In</u>, *SAin 'sign'
              BA.REN.<u>ta.In</u>, *BA.ren.TAin 'Valentine';
              BA.REN.<u>TA.in</u>.DEe, *BA.REN.tain.DEe 'Valentine's Day'
    b. /oin/   ko.In, *KOin 'coin'; KO.in.SHOo 'coin dealer'
              SAA.ro.In, *saa.ROin 'sirloin'
    c. /uin/   tsu.In, *TSUin 'twin'
    d. /ein/   SU.pe.In, *su.PEin 'Spain'
              SU.PE.in.KA.ze, *SU.pein.KA.ze 'Spanish Flu'
    e. /aun/   BU.ra.Un, *bu.RAun 'brown'
              A.na.Un.su, *a.NAun.su 'announce'
              A.NA.un.SAa, *A.naun.SAa 'announcer'

(30) /ViViN/ → 1~2 syllables[5]
    a. ro.On ~ ROon (*or* ROo.n) 'loan'
      ro.On-ga ~ ROon-ga, *roo.N-ga 'loan-NOM'
    b. che.En ~ CHEen (*or* CHEe.n) 'chain'
    c. HA.ri.KEen, *HA.RI.ke.En 'hurricane'
      HA.ri.KEen-ga, *HA.RI.ke.En-ga 'hurricane-NOM'
    d. RIN.KAan, *RIN.ka.An 'Lincoln'
      RIN.KAan-ga, *RIN.ka.An-ga 'Lincoln-NOM'
      RIN.KA.an.KA.ra ~ RIN.kaan.KA.ra 'from Lincoln'

(31) /ViViC/ → 1~2 syllables
    a. /ook/ TOO.<u>kyook</u>.KO ~ TOO.KYO.<u>ok</u>.KO (Type B) 'Tokyoite'

(32) /ViVjC/: 1 syllable vs. 2 syllables (1μ+2μ)
    a. /aiC/ → 1 syllable
        GEN.<u>DAik</u>.ko, *GEN.da.Ik.ko 'children of the new generation'
    b. /oiC/ → 2 syllables
        SAN.<u>do.It</u>.chi, *SAN.DOit.chi 'sandwich'
        <u>o.Ik</u>.ko, *Oik.ko 'nephew'

(33) /VNC/ → 1 syllable
    a. /onk/ RON.<u>DOnk</u>.ko, *RON.do.Nk.ko 'Londoner'

(34) Summary (KJ-Teuchi)
    a. /ViVjN/ splits into two syllables, /Vi + VjN/.
    b. /ViVjC/ shows different patterns between /o+iC/ (two syllables) and /aiC/ (one syllable).

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[5] /ViVi/ tends to be pronounced as a short vowel if followed by a coda consonant, /N/ or /C/.

c. /ViViN/ and /ViViC/ vary between /Vi＋ViX/ (two syllables) and /ViViX/ (one syllable).

d. /VNC/ behaves like one syllable.

4.4. KJ-Kuwanoura (60 native speakers)

(35) Basic patterns

a. Two H tones in relatively long words just as in KJ-Teuchi (=(26)).

b. H2 shift: Like KJ-Teuchi (Type A), H2 shifts to the head mora of the syllable to avoid rising contour tones. E.g. *puU.ru → PUu.ru 'swimming pool'

c. **H1 spreading:** H1 is usually realized on the initial two moras (from left to right), but it spreads to the third mora if the second and third moras belong to the same syllable. That is, **the entire syllable containing the second mora becomes H in addition to the initial mora.**

d. Unlike other KJ dialects, H1 and H2 are calculated independently and allowed to clash with each other:
    e.g. (Type A) KA.DA.MOn, *KE.da.MOn 'wild animal'
   (Type B) O.TO.KO, *O.to.KO 'man'

(36) H1 spreading

a. falling contour tone   b.
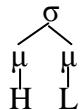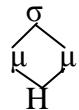
(37) H1 spreading (examples)

a. *KA.ZAi.MON → KA.ZAI.MOn 'decoration (colloquial)'
    cf. KA.ZA.ri.MOn 'decoration'

b. *FU.RAn.DAa.su → FU.RAN.DAa.su 'Flanders'

c. *NI.GIi.ME.shi → NI.GII.ME.shi 'rice ball (colloquial)'
    cf. NI.GI.ri.ME.shi 'rice ball'

(38) /ViVjN/ → 2 syllables (1μ+2μ)

a. sa.In, *SAin 'sign'

b. BA.REN.ta.In, *BA.REN.TAin 'Valentine'

c. DE.ZA.in-HA.ku, *DE.ZAIN-HA.ku, *DE.ZAI.n-HA.ku 'Design Expo'

d. SU.PE.in-KA.ze, *SU.PEIN-KA.ze, *SU.PEI.n-KA.ze 'Spanish Flu'

e. SAA.ro.In, *SAA.ROin 'sirloin'

f. A.NA.un.SAa, *A.NAUN.SAa, *A.NAU.n.SAa 'announcer'

(39) /ViViN/ → 1 syllable ~ 2 syllables

a. ro.On ~ ROon

9

    b.   ro.On-ga, *ROon-ga, *ROO.N-ga

    c.   RIN.KAan, *RIN.ka.An, *RIN.KAa.n 'Lincoln'

    d.   RIN.KAan-ga, *RIN.ka.An-ga, *RIN.kaa.N-ga 'Lincoln-NOM'

(40) /ViVjC/: 1 syllable vs. 2 syllables (1μ+2μ)
    a.   /aiC/ → 1 syllable
        GEN.<u>DAik</u>.ko, *GEN.da.<u>Ik</u>.ko 'children of the new generation'
    b.   /oiC/ → 2 syllables
        o.<u>Ik</u>.ko, *<u>Oik</u>.ko 'nephew'
        SAN.do.<u>It</u>.chi, *SAN.<u>DOit</u>.chi 'sandwich'

(41) /VNC/ → 1 syllable
    a.   RON.DOnk.ko, *RON.do.Nk.ko 'Londoner'

(42) Summary (KJ-Kuwanoura)[6]
    a.   /ViVjN/ always behaves like a Light-Heavy disyllable.
    b.   /ViViN/ varies between two patterns, monosyllabic and disyllabic (Light + Heavy).
    c.   /VNC/ shows a monosyllabic behavior.
    d.   /ViVjC/ behaves differently between /aiC/ (monosyllabic) and /o.iC/ (disyllabic).

5. Conclusion

(43) a. Different dialects of Japanese are sensitive to the syllable in different ways and to different degrees.

b. They do not generally permit superheavy syllables, i.e. trimoraic syllables are much less common than is often assumed in the literature.

c. /ViVjN/ always splits into two syllables in all the pitch accent systems examined, yielding a Light-Heavy disyllabic structure (/Vi + VjN/).

d. Interestingly, /ai/, /oi/ and /ui/ generally form diphthongs in these dialects (Kubozono 2015a), but they split into two syllables when followed by a coda consonant:[7] i.e.

$$
\begin{array}{ccc}
\sigma & & \sigma \quad \sigma \\
\wedge & & | \quad \wedge \\
\text{a i} & \text{but} & \text{a} \quad \text{i n}
\end{array}
$$
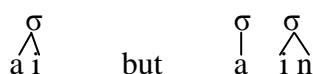
    e.   /ViViN/, /ViViC/ and /ViVjC/ show the same disyllabic pattern across the dialects, but they occasionally behave like a superheavy syllable in some dialects.
    f.   /VNC/ exhibits dialectal differences: it is processed as a Light-Heavy sequence in some dialects, but as a superheavy syllable in others.

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[6] There is no relevant data (or test words) of /ViViC/ and /ViViVj/ for this dialect.
[7] This is analogous to the phenomenon of pre-nasal vowel shortening (7b), where long (tense) vowels and diphthongs in English words are borrowed as long vowels/diphthongs in Japanese except when they are followed by a coda consonant.

(44) Summary (5 dialects x 6 structures)

| Structure \\ Dialect	/V_iV_jN/ **rain** **koin**	/ViVjC/ den**daik**ko san**doit**chi	/V_iV_iN/ rin**kaan** hari**keen**	/ViViC/ suki**toot**ta too**kyook**ko	/VNC/ ron**donk**ko	/ViViVj/ **booi** **ooi**
Tokyo	2syllables (1μ+2μ)	2 syllables (1μ+2μ)	**2**(1μ+2μ) **~1 syllable**	**1 syllable?**	2 syllables (1μ+2μ)	*To be checked*
Kagoshima	2syllables (1μ+2μ)	2 syllables (1μ+2μ)	2 syllables (1μ+2μ)	2 syllables (1μ+2μ)	2 syllables (1μ+2μ)	2 sylls **(2μ+1μ)**
KJ-Taira	2syllables (1μ+2μ)	2 syllables (1μ+2μ)	2 syllables (1μ+2μ)	*To be checked*	2 syllables (1μ+2μ)	*To be checked*
KJ-Teuchi	2syllables (1μ+2μ)	**1 syllable vs 2 syllables** (1μ+2μ)[8]	**1~2** syllables (1μ+2μ)	**1~ 2** syllables (1μ+2μ)	**1 syllable**[9]	*To be checked*
KJ-Kuwanoura	2syllables (1μ+2μ)	**1 syllable vs 2 syllables** (1μ+2μ)[8]	**1~2** syllables (1μ+2μ)	*To be checked*	**1 syllable**	*To be checked*

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[8] /aiC/ behaves like a monosyllable, e.g. /GEN.DAik.ko/, whereas /oiC/ behaves like a Light+Heavy disyllabic sequence, e.g. /SA.do.It.chi/.
[9] I.e. /ron.donk.ko/, */ron.do.nk.ko/.

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Koshikijima Islands

Segami
Oshima
Kuwanoura
Sato
Taira
Eishi
Nakakoshiki
Kashima
Nagahama
Sesenoura
Katanoura
Aose
Teuchi
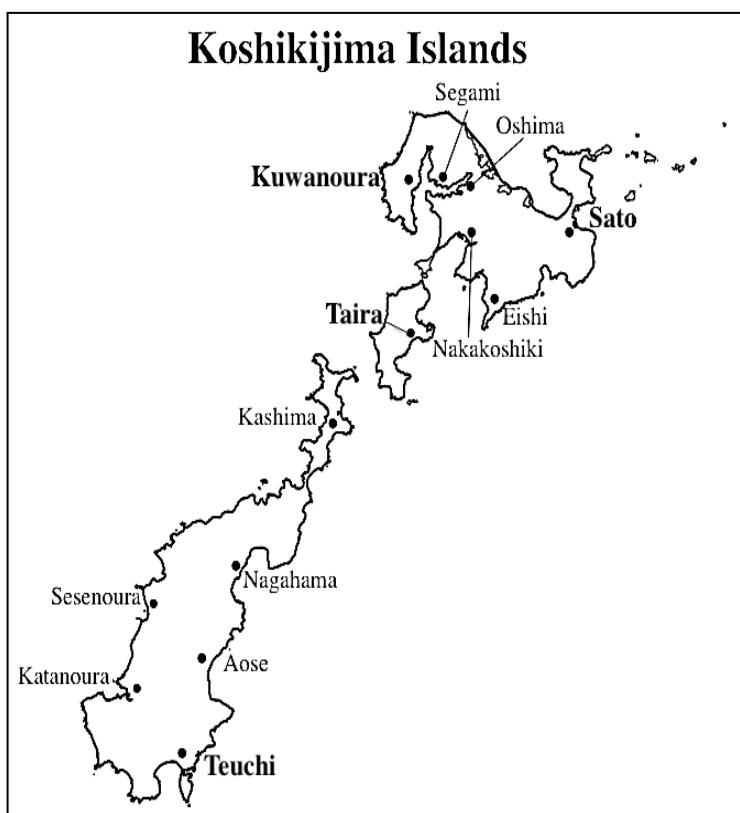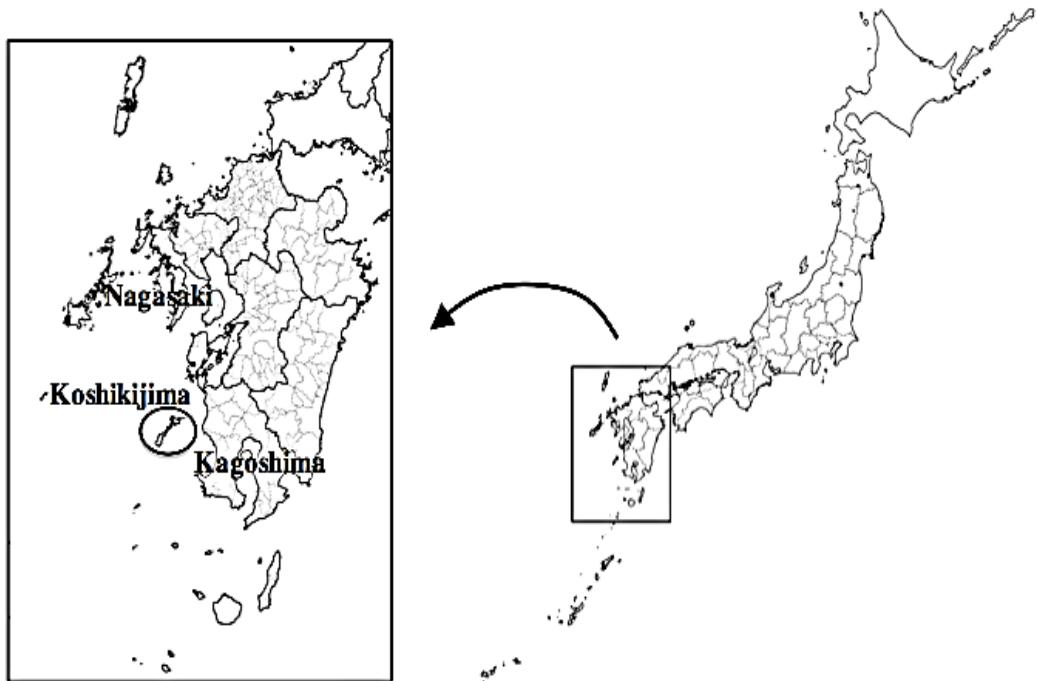
38 km (north to south) x 10 km (east to west)