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What is an N-pattern Accent System?

UWANO Zendō

Abstract: After defining an N-pattern accent system as a system where only N oppositions exist irrespective of the length of the accentual unit, I examine four characteristics cross-dialectally and argue that: (1) The accentual unit is the breath-group (bunsetsu), which is found pan-dialectally; (2) Serialisation basically holds true for the system, but not when a noun has an accent specified from the end of the word; (3) Both the compound accent rule to the effect that the compound inherits the accentual class of its first component, and accent pattern congruity across the conjugation have many exceptions, with both depending on how the dialect underwent historical changes, at least in mainland Japanese. Finally, the histories of 2-pattern accent systems in Kyushu and 3-pattern accentual systems in Oki-no-shima are considered.

Keywords: N-pattern accent system, breath-group-centred nature, serialisation, compound accent rule, consistency of accent classes within the conjugation

1. Introduction

After defining an “N-pattern accent system” as a “system where, even if the length of the accentual unit increases, the number of possible accentual contrasts does not increase above a certain number (N)” (§2), I take up four characteristics typically observed in the Kagoshima dialect (§3.1) and consider them in various dialects. I put forward the following conclusions: [1] Auxiliaries do not carry an accent, and the breath group (bunsetsu) is most widely recognised as the relevant accentual unit (the so-called breath-group-centred nature (bunsetsu-sei))(§3.2); [2] In principle there is also a serialisation of pitch patterns between breath groups; however there are exceptions in cases where the accent location is determined from the end of the word (and not from the end of the breath group) in the free form (§3.3); [3] the accentuation of compounds is inherited from the compound-initial element (this is the so-called compound-accent rule)(§3.4); [4] conjugated forms of a word all belong to the same accentual class (so-called consistency of accent classes within the conjugation)(§3.5). [3] and [4] have many exceptions, and at least within the mainland Japanese dialects this is due to how the historical process of accent class merger took place. Finally, I discuss the historical development of the Kyushu 2-pattern accentual systems and the Oki-no-shima 3-pattern accentual systems (§4).
2. Definitions and background

2.1 Terms and definitions

In the term “N-pattern accent system”, the N is written using a capital letter (this is a change from Uwano (1977: 307)), and in Japanese is pronounced as *enu-kei*. It describes properties, to be discussed below, of the system as a whole, and N is given a numerical value (e.g. “2-pattern accent system”). In contrast to this, when referring to specific accentual patterns (and vocabulary items which belong to these classes), a lower case n is used (n-pattern) and in Japanese this is pronounced as *enu-gata*. For example, *ame* ‘rain’ is a 1-pattern (or ① pattern) word.

“N-pattern accent system” is defined as a “system where, even if the length of the accentual unit increases, the number of possible accentual contrasts does not increase above a certain number (N)”. In contrast, a “system where, as the length of the accentual unit increases, the number of accentual contrasts correspondingly increases” is called a multi-pattern accent system. Whereas a multi-pattern accent system is an incremental system, an N-pattern accent system is a constant system. There are two types of N-pattern accent system – those where all words from one “beat” up consistently have N patterns, and those where for short words there are fewer than N patterns, but when words surpass a certain length there are N patterns. Here the term “beat” is used as a cover term for the prosodic units mora and syllable.

Representative of the multi-pattern accent systems is the Tokyo dialect, which can be represented as $P_n = n + 1$, where n is the number of moras and P is the number of contrasting accentual patterns. Using this kind of formulation, an N-pattern accent system is $P_n = N$. By definition, the value of N must be 1 or above (if N=0, it is an accentless dialect, and this is not included under N-pattern accent systems). Replacing n with a whole number, an N=1 system is a 1-pattern accent system, N=2 is a 2-pattern accent system, etc. Recent research on Korean dialects reports various 4- and 5-pattern accent systems, but as far as Japanese dialects are concerned, the maximum number of patterns is N=3, and these are all found in western Japan.

This N has two different aspects to it. Viewed cross-linguistically it is a variable which is flexible enough to include various language/dialect types. On the other hand, viewed from the perspective of individual languages or dialects, it functions as a constant.

2.2 Background

Prior to the formulation of the N-pattern accent system classification, there was Teruo Hirayama’s classification as 1-pattern, 2-pattern and multi-pattern accent systems (excluding his unaccented systems). Hirayama, who discovered that the south-west Kyushu dialects were 2-pattern dialects (Hirayama 1940: 191) (in Hirayama 1951 he used the term 2-pattern tone contour), treated only 2-pattern systems as worthy of special attention, probably because they are systems in which the characteristics of N-pattern accent systems, which I detail below, are expressed with most regularity (see §3.1), and although he notes that the Yonaguni dialect (Ryukyuan) is a 3-pattern accent system, he groups it
together with the Tokyo dialect and others as a multi-pattern dialect (Hirayama & Nakamoto 1964). For Hirayama, 1-pattern and 2-pattern systems were of special interest, and the multi-pattern system was positioned as the general case of non-1-pattern and non-2-pattern systems, and in the early days his interest probably lay in the Kansai-type vs. Tokyo-type classification and genealogical considerations.

It was against this background, expecting to find 4-pattern accent systems in the Seto Inland Sea region, that I proposed the idea of the N-pattern accent system (Uwano 1984a), so as to include 3- and 4-pattern accent systems and not give 2-pattern accent systems a special position. Although the terminology is the same as Hirayama’s, the way I use the term ‘multi-pattern accent system’ in contrast with ‘N-pattern accent system’ is completely different. There is also the position that all accent systems which have more than one contrast are multi-pattern accent systems (Kindaichi 1941; Satō 1980), but this position differs completely from that taken in this paper.

The primary sense of “N-pattern accent systems” as used here refers to a system as a whole. So, referring, for example, to bimoraic nouns in the Kansai dialects as being a 4-pattern accent system is inconsistent with this usage. However, I do sometimes extend the usage to refer to the “whole system of different parts of speech”, as in, for example, when talking of the Tokyo dialect, “nouns have a multi-pattern accent system, but verbs and adjectives have a 2-pattern accent system” and “adjectives are progressing towards a 1-pattern accent system”.

However, repeating my basic position, it is the “system as a whole” which determines whether a language or dialect has or does not have an N-pattern accent system, and the sub-systems found in different parts of speech are used only when organising and analysing the internal structure of an N-pattern accent system. Also, I do not start by separating the vocabulary into simple words and compound words and determining the number of accent contrasts on the basis of simple words alone. Even if simple words have only two accent patterns, if compound words are multi-patterned (and not describable merely as a sequencing of the pitch contours of the component simple words), I determine the language/dialect to have a multi-pattern accent system. My view is that the analysis of compound words is a separate issue from the system as a whole.

For establishing the system, the existence of contrasting “patterns” is itself important, and from my standpoint whether each pattern has many words or few words is not a relevant consideration. Even if there are few words evidencing a particular pattern, as long as the existence of the pattern is certain, the pattern is incorporated into the system. There is an analysis (Kubozono 2006: 15) which states that the Tokyo dialect is statistically a 2-pattern accent system (−3 pattern and the unaccented pattern), but, although this view may be useful for considering future developments, the fact that patterns such as yama] ‘mountain’, yomi](−ga hukai) ‘reading (is deep)’; otoko] ‘man’, hanasi] ‘speech’, soba]ya ‘soba noodle shop’; ooto] ‘younger brother’, asio] ‘sound of footsteps’, ka]makiri ‘grasshopper’ do exist means that there is no doubt that the present-day accent system of the Tokyo dialect is a multi-pattern system.
Concrete examples from various dialects given in this paper are from this author’s own fieldwork. I will use the following annotation for pitch contours (1):

(1) [ : rise ] : fall  [[ : rise within a mora ]] : fall within a mora
% : half rise  ! : half fall  !! half fall within a mora
ˇ : gentle rise within a mora following a fall (= ][[ )
. : utterance-final form  ... : non-utterance-final form

3. Issues regarding N-pattern accent systems
3.1 Overview

Here I will take up each of the four characteristics of the Southern Kyushu N-pattern accent systems (① breath-group-centred nature, ② serialisation, ③ compound accent rule, ④ consistency of accent patterns within the conjugation), and consider whether each applies in other N-pattern accent systems.

First I will take examples (2) from the 2-pattern accent system of the Fukiage dialect of Hioki city (formerly Hioki county) in Kagoshima prefecture (this system is identical to that of the Kagoshima dialect reported by Hirayama (1936, 1951, etc.) and Kibe (2000)), and based on this I provide concrete examples in (3) – (6) of each of the four characteristics. The A-pattern/B-pattern (also called series) is the label traditionally used since Hirayama (1936, 1951). In the Fukiage dialect, A-pattern words cause the penultimate syllable in the breath group to be pronounced on a high pitch (the pitch contour in monosyllabic words is a compressed version of this), and with B-pattern words the ultimate syllable in the breath group is pronounced high. For both A and B, the pitch pattern is contained within the breath group and does not influence following breath groups. The relevant prosodic unit for assigning/bearing high pitch is the syllable, as can be observed from the parenthesised compound forms given in (5).

(2) 2-pattern accent system of the Fukiage dialect
A: [ha] [ka]ze sa[ka]na kaze[hi]ki sakana[cu]ri
   ‘leaf’ ‘cold’ ‘fish’ ‘person with a cold’ ‘fishing’
B: [ha ya[ma oto[ko yamami[ci otokobu[ri
   ‘tooth’ ‘mountain’ ‘man’ ‘mountain road’ ‘manliness’

(3) The breath-group-centred nature of Fukiage dialect accentuation
A: [ha]-mo ha-[ka]ra ha-ka[ra]-mo ha-kara-[de]-mo
   ‘leaf-also’ ‘-from’ ‘-from-also’ ‘-from-COP-even’
   ha-kara-de-sa[e]-mo
   ‘-from-COP-EMPH-even’
B: ha-[mo ha-ka[ra ha-kara-[mo ha-kara-de-[mo
   ‘tooth-also’ ‘-from’ ‘-from-also’ ‘-from-COP-even’
   ha-kara-de-sae-[mo
   ‘-from-COP-EMPH-even’
(4) Serialisation in the Fukiage dialect
A: [ha]-mo = [ka]ze ha-[ka]ra = ka[ze]-ga = sa[ka]na
   ‘leaf-also’ ‘cold’ ‘leaf-from’ ‘cold-SUBJ’ ‘fish’
   ha-ka[ra]-mo = saka[na]-ga = kaze[hi]ki
   ‘leaf-from-also’ ‘fish-SUBJ’ ‘person with a cold’
B: ha-[mo = ya[ma ha-ka[ra = yama-[ga = oto[ko
   ‘tooth-also’ ‘mountain’ ‘tooth-from’ ‘mountain-SUBJ’ ‘man’
   ha-kara-[mo = otoko-[ga = yamami[ci
   ‘tooth-from-also’ ‘man-SUBJ’ ‘mountain road’

(5) Fukiage dialect compound accent rule\(^{3, b)}\)
A: [ka]ze → kaze[hi]ki (ka[ze]hit), kazegu[su]ri (kaze[gu]suy) etc. all A
   ‘cold’ ‘person with a cold’ ‘cold medicine’
B: ya[ma → yamami[ci (yama[mi], yamanobo[ri (yamano[boy etc. all B
   ‘mountain’ ‘mountain road’ ‘mountain climb’ ‘man’
   ‘Kagoshima University’ ‘Miya University’
B: Hukuoka[ka, Ooi[ta → Hukuokadayga[ku, Ooitadayga[ku etc. all B
   ‘Fukuoka University’ ‘Oita University’

(6) Consistency of acc. patterns within conjugation (incl. derivations such as passive and causative)
   ‘sell’ ‘not sell’ ‘sold’ ‘if sell’ ‘sell!’ ‘make (s.o.) sell’
B: to[ru to[ran tot[ta tore[ba to[re tora[sut etc. all B
   ‘take’ ‘not take’ ‘took’ ‘if take’ ‘take (it)!’ ‘make (s.o.) take’

3.2 Breath-group-centred nature
The breath-group-centred nature of accentuation refers the phenomenon, illustrated in (3), where particles and auxiliaries, either individually or in combination with other particles/auxiliaries, do not have accents of their own but instead the pitch contour is constructed on a single breath group (a free form with one or more particles or auxiliaries). The accentuation of this breath group is determined by the accentual class of the free form (typically a noun). Therefore, these particles and auxiliaries are not dependent words (a sub-class of “word”), but can be classified as dependent “forms”, a lower level unit. As far as I am aware, this phenomenon is most commonly found in N-pattern accent systems.

Using the Fukiage dialect as an example, all particles and auxiliaries, excluding those given in (8) and (9) below, and syntactically and semantically permissible combinations (-kara-bakari-de-sae-mo ‘-from-only-COP-EMPH-even’ etc.) behave in this way (Uwano 1984a: 169, 196). The significance of this becomes clear when compared to the Tokyo dialect situation in (7) (where ] ) is an accent kernel, and final = indicates lack of an accent kernel).
(7) Behaviour of particles and auxiliaries in the Tokyo dialect
/kaze= ; kaze-ga=, kaze-ni=, kaze-mo=, kaze-wa=, kaze-da=, kaze-kara=/
'wind' 'SUBJ' 'by' 'also' 'TOP' 'COP' 'from' /kaze-ma]de, kaze-ni]-mo, kaze-ni]-made, kaze-kara]-wa, kaze-ma]de-wa/
'wind-even' 'toalso' 'to-even' 'from-TOP' 'even-TOP'

In the Tokyo dialect, particles like –made 'until, even' have their own accent, and when sequences of particles such as -ni-mo ('to/by-also'), -kara-wa ('-from-TOP') follow an unaccented word, there is a rule which inserts an accent after the first particle, and these details must be described as part of the behaviour of these particles. In contrast, there is no need for this in the case of N-pattern accent systems.

However, there are the following three types of forms which behave as dependent "words".4

Firstly, there are dependent words such as in (8), which derive from free forms and so were originally separate breath groups. They have phonetically fused together with the preceding morpheme and formed a new accentually independent yet syntactically dependent word.

(8) Dependent words formed from free forms in the Fukiage dialect
Post-nominal copular zyat (or zya) B (< -de + aru B) and its conjugation forms
Post-verbal continuative cyot / zyot A (< -te/de + oru A) and its conjugation forms

In (9), the vertical line preceding zyat ( │ ) marks a hiatus in the accentuation, and this can be seen from the pitch contour preceding the hiatus. The pitch contour is reset at the “│”, and after the “│” the zyat is not markedly high, unless emphasis is placed on it. Although zyat is accentually independent, the accent pattern of zyat itself does not become overt, so in that respect it is weaker than a free form.

(9) A B
[ha]na 'nose' ha[na 'flower'
[ha]na │ zyat 'nose COP' ha[na │ zyat 'flower COP'
Cf. ha[na]-zya 'nose-with.TOP' hana-[zya 'flower-with.TOP'
hana-[ka]ra 'nose-from' hana-ka[ra 'flower-from'
hana-[ka]ra │ zyat 'nose-from COP' hana-ka[ra │ zyat 'flower-from COP'

The second type of forms which behave as dependent "words" are accentually independent yet syntactically dependent words at the sentential level, and include the forms in (10). These differ from particles and auxiliaries which attach directly onto preceding nouns, verbs and adjectives, in that they attach to more sentence-like units, and the degree of attachment is loose. Together with (8) they do not participate in creating a breath group with the immediately preceding free form. Briefly outlining each form in (10), to is a formal noun – in other words, it is equivalent to a separate breath group (and when a particle attaches to it we can see that it belongs to the A class). The quotation marker ci is preceded by a quoted
phrase, a type of sentence. The conjunctive particle *si* covers a large variety of conjugation forms, following polarity and tense markers, and even modal elements, so it is high in independence. Interjective and sentence-final particles are outside of the sentence structure.

(10) Accentually independent yet syntactically dependent words at sentential level
Formal noun *to* ‘(the) one’; quotative *ci*; conjunctive particle *si*; the interjective and sentence-final particles *ka/kaa* ‘interrogative’ (cf. -*ka* ‘or’ which suffixes), *do* ‘EMPH’, *nee* ‘isn’t it’, *kay* ‘interrogative’

Finally, although there are no examples of this in the Fukiage dialect or other 2-pattern accentual systems in Kyushu, particles which are semantically emphatic or restrictive can occur. The examples in (11) are dependent words which have taken on phonetic prominence reflecting their emphatic, restrictive, or focussing functions, and are not included in the breath group (or have reverted to an accentually independent realisation). Either way, the accentual unit ends immediately before these forms.

(11) *bakkari* ‘only’ and the like in the dialects of Oki-no-shima and Kikai-jima; *dake* ‘only’ in the Mikuni dialect of Fukui prefecture (Yamaguchi 1984: 215); *dake* ‘only’ in the Oki-no-shima dialects (Matsumori 2011a)

### 3.3 Serialisation

Serialisation refers to the phenomenon where the tone contour on a free word (noun) of prosodic length *p* suffixed with a particle or auxiliary of prosodic length *q* has the same contour as a noun from the same series with prosodic length *p*+*q* (i.e. *Np* + *Pq* = *Np+q*). One aspect of serialisation is that it does not always hold, and whether it does or not depends on the accentual characteristics of the free form itself.

First I will give the example of serialisation in the dialect of Makurazaki city, Kagoshima pref., which, although a 2-pattern accent system, has tone contours very different from those observed in the Fukiage dialect (4). (The examples in (12) are A: ‘bamboo’, ‘cherry tree’, ‘weft thread’, ‘pale pink’; B: ‘flower’, ‘mind’, ‘morning glory’, ‘mountain man’.) In the A pattern, only the penultimate syllable of the breath group is low, and in the B pattern the breath-group-final syllable is pronounced on a mid tone. In both A and B, if there are two or more syllables preceding the change in pitch, the word initial syllable is also low.

(12) Serialisation in the Makurazaki dialect


ya[maoda!go] ya[maodogo!-ŋa]

As an example of serialisation in 3-pattern accent dialects, I give the Nakamura dialect of Oki-no-shima town (formerly Saigō-chō) (Uwano 1989). I will use A/B/C to label the three patterns. In the Oki-no-shima dialects there are only two patterns for historically mono-moraic words; the A contour is lacking. The C pattern alternates depending on whether it is utterance-final or not. Due to space considerations, only part of the serialisation data is given for each series.

(13) Accent system and serialisation in the Nakamura dialect, Oki-no-shima


C: ˇe [soˇra] [usaˇgi] [niwatoˇri] [watasibuˇne] ‘picture’ ‘sky’ ‘rabbit’ ‘ferry’ ‘picture-SUBJ’ ‘sky-SUBJ’ ‘rabbit-SUBJ’ ‘chicken-SUBJ’


B: e-[kara-de]-mo = ya[ma-kara]mo = ko[koro-ka]ra = a[saga]-ga

C: [e-kara-de-ˇmo. = [sora-kara-ˇmo. = [usagi-kaˇra. = [niwatori-ˇga.

However, several exceptions to serialisation have been found. One example is the Wan dialect (14) spoken on Kikai-jima, a Ryukyuan dialect although administratively part of Kagoshima pref. (Uwano 1984a). I use the labels α/β because the division on vocabulary between the two classes does not correspond to the A/B division in the 2-pattern Kyushu dialects. Pattern β has different contours depending on whether it is utterance-final or not, but pattern α lacks this distinction. Mono-moraic words are all pattern α.
3.4 Compound accent rule
3.4.1 Dialects where the compound accent rule applies and where it does not
It is widely known that in the 2-pattern accent systems of Kyushu, what Hirayama (1936: 550) calls the “general compound rule” (in Hirayama 1951: 152 it is referred to as the “rule concerning general compounding”) applies. The rule was first discovered by Polivanov (1976[1928]: 57). Below I shall call it the “compound accent rule”, and it can be formulated as:
Compound words inherit the pitch pattern of the compound-initial component.

Thus, if the initial component is of the A class, then the compound will be A, and if the initial component is B then the compound as a whole will be B, and in both cases the compound-final component plays no role in determining the accent class. The A/B of the initial component becomes the A/B of the compound, and it dominates the entire breath group, and from the accent class of the compound the accent class of the compound-initial component can be deduced (whereas the accent class of the compound-final element cannot be deduced), so there is a two-way relationship.

In the Tokyo dialect, compounds ending in -daigaku 'university' always have the accentuation -daigaku. Compare this with the Fukiage dialect compounds ending in -daygaku (5). In the Fukiage dialect, regardless of the part of speech or origin of the words involved, (15) holds. Whether western loanwords or compound nouns, verbs or adjectives (examples of the latter omitted), the compound-initial component determines the pitch contour by rule, as in (16).

Fukiage dialect compounds
A: kon[pyuu]taa 'computer' → konpyuutaa[gak]ka 'computer science dept.'
B: ameri[ka 'America' → amerikagassyyuko[ku 'U.S.A.'
A: [u]ru ([u]t)⁹ 'sell' → uridasihazi[me]ru (uydaç[hay]mu) 'start to put on sale'
B: to[ru ([tot]) 'take' → toridasihazime[ru (toydaçhay[mu]) 'start to take out'

In so far as the compound-final component does not contribute to determining the accent pattern, it is similar to particles and auxiliaries not contributing to the breath-group-centred nature, but whereas particles and auxiliaries in N-pattern accent systems do not have their own accent patterns, compound-final components do have their own accent patterns when used in isolation. Also different from the breath-group-centred nature is the fact that there are many dialects where the compound accent rule does not apply and, moreover, at least as far as mainland Japanese dialects are concerned, whether it applies or not has an historical explanation (see §3.4.2).

An example of dialects where the compound accent rule does not apply is the Oki-no-shima dialects. Oki-no-shima is made up of four islands and divides into Dōzen and Dōgo. The Chibu dialect spoken on Chiburi island, one of the three islands which make up Dōzen, is the only Oki-no-shima dialect which has a 2-pattern accent system. All the other dialects have 3-pattern accent systems, but in neither type of dialect is the compound accent determined by the compound-initial component (Uwano 1984b; Hiroto & Ōhara 1953).

Looking at the 3-pattern accent systems, we have the following (examples where the compound accent rule applies are also included).
Compounds in Oki-no-shima 3-pattern accent system dialects
migi A → migiude, migigawa, migihidari, migimawari – all dialects A
‘right’ ‘right arm’ ‘right side’ ‘left & right’ ‘clockwise’
nabe C → nabemono, nabesiki – all dialects C
‘pan’ ‘one-pot dish’ ‘pot stand’
niwa A → niwaisi, niwasigoto, niwabooki, niwaiziri,
‘garden’ ‘garden stone’ ‘garden work’ ‘garden broom’ ‘gardening’
niwazukuri – all dialects A
‘garden making’
niwatorī – all dialects C (tori is normal; niwatorī is a loanword)
‘chicken’
nacu B → nacuhuku, nacumikan, nacumono,
‘summer’ ‘summer clothes’ ‘Chinese citron’ ‘summer goods’
nacuyasumi, nacuyase – all dialects A
‘summer holiday’ ‘summer weight loss’
asi B → asigaru – all dialects C; asikosi – most dialects B but some A;
‘leg, foot’ ‘infantry’ ‘lower body’
asiato, asio, asikubi, asidome, asinami,
‘footprint’ ‘sound of footsteps’ ‘ankle’ ‘standing’ ‘in step’
asigakari – all dialects A
‘foothold’

Over the whole of Oki-no-shima, A → A is common, and C → C is also observed with usagi ‘rabbit’, so it appears that the compound accent is regularly predictable from the compound-initial component in the case of migi, nabe and niwa. If niwatorī ‘chicken’ is viewed as not being related to niwa ‘garden’ at the time of borrowing, its aberrant accentuation receives an explanation. However, I have yet to find a B noun which regularly produces compounds which are B. (ya ‘arrow’ and ya-zirusi ‘arrow mark’ are both B, but the rare word ya-omote ‘brunt’ is C in some locations.) As for B-class nouns, B → A is common, and many exceptions to C → C are C → A. Overall, compound nouns tend to be A. On the other hand, although asa ‘morning’ is A in most Oki-no-shima dialects, compounds formed from it are a mixture of A, B and C.

In various Japanese dialects, the compound accent rule typically applies when the compound-final component is 3 moras long and the compound-initial component is 2-4 moras long. From this it seems that there may have been too many short compounds in my survey, but given the fact that in the Kagoshima dialect (and also the Iwate dialect to be discussed below) short compounds also follow the compound accent rule, length cannot be given as a reason.

In the Chibu dialect, where A and C have merged (represented below as A=C) to produce a 2-pattern accent system where A=C and B contrast, it is difficult to find evidence of the compound accent rule. In (18), A=C → A=C (as with ame ‘candy’, kaze ‘wind’) is common, but there are also examples like kuci ‘mouth’. On the other hand, apart from B → B asa ‘morning’ there is also namida ‘tear’, but other B words are either like nacu ‘summer’ where all compounds become A=C, or they produce some A=C compounds.
3.4.2 Register preservation rule

The compound accent rule is actually more widely known as the “register preservation rule”, and it is known to also apply in certain multi-pattern accent systems. In so-called gairin-type tone systems (Kindaichi 1974: 138-9; 1978),10 so-called because they are most distant from the Kyōto/Ōsaka region in central Japan,9 where the Matsue city dialect of Shimane pref. and the Tōhoku (North-east) dialects such as that of Shizukuishi in Iwate pref. among others have merged their historical accentual classes as in (21) below, there is the phenomenon where the presence or absence of an accent on the compound-initial component corresponds to the presence or absence of an accent on the compound as a whole (and the presence or absence of an accent on the compound-final component is irrelevant). In (19) I present data from the Shizukuishi dialect, this author’s native dialect. Unaccented words are marked with ⓪, and accented (regardless of the location of the accent) is denoted with ₵, and even non-existent compounds (not glossed below) are immediately and unambiguously accented as in (19).

(19) Shizukuishi dialect, Iwate pref.

⓪ sara, taru, cugue + mawasu ⓪ → ⓪ (saramawasu, tarumawasu, ‘plate’ ‘barrel’ ‘desk’ ‘turning’ ‘dish turning’ ‘barrel turning’ cuguemawasu, …)

₪ saru ①, u~de ②, kaŋami ③ + mawasu ⓪ → ₵ (sarumawasu ④, ‘monkey’ ‘arm’ ‘mirror’ ‘turning’ ‘monkey trainer’ u~demawasu ④, kaŋamimawasu ⑤: all –②)

‘arm rotation’
Kindaichi (1937) discovered that, going further back in history, the Kyōto dialect of the late 11th century had a regular preservation rule whereby the high-beginning/low-beginning feature of the compound-initial component determined whether the compound began high or low (see also Kindaichi 1944, 1953), and this is assumed to also have been the case in the proto mainland-Japanese accent system (Uwano 2006). Kindaichi’s “accent classes” refers to the contrasting accent patterns which existed in the proto system and also to the vocabulary items which belong to each class. Using that classification in (20), // divides the high-beginning classes from the low-beginning classes, and when a word which belongs to the high-beginning group is the initial component in a compound, the compound begins high, and when a word which belongs to the low-beginning group is a compound-initial component, the compound begins low.

In (20), 1-2 refers to class 2 of 1-mora words, and / is used to separate classes. “High” indicates a high-beginning group of classes, and “low” a low-beginning group.

(20) 1-1/2 (high) // 3 (low)
     2-1/2 (high) // 3/4/5 (low)
     3-1/2/3 (high) // 4/5/6/7 (low)

As long as there has not been a merger across the // division (and no later change has obliterated the // division)\(^{11}\), it is predicted that register (high-beginning or low-beginning) will be preserved. The Matsue and Shizukuishi dialects are dialects where mergers have not occurred across the // division, and in these dialects the high-beginning group corresponds to unaccented, and the low-beginning group corresponds to accented words. (In the Shizukuishi dialect the pitch rises at the accent kernel (an ascending accent kernel), whereas in the Matsue dialect the pitch falls at the accent kernel (a lowering kernel), but this is unrelated to the issue of register preservation. What is relevant is the accent classes.)

The above is summarised in (21). The Kagoshima dialect entry in (21) is read as class 1 and 2 monomoraic words have merged as A-pattern words (some researchers use “・” with the same meaning as “.”), and monomoraic class 3 words have the different B pattern, and across all word lengths the A//B distinction corresponds to the high-beginning//low-beginning distinction of the proto system. In the Shizukuishi dialect, class 1 and 2 bi-moraic words have merged as the unaccented (④) pattern, and class 4 and 5 have merged as accented, and are distinguished from class 3 words by the location of the accent, but viewed overall the unaccented//accented distinction corresponds to the high-beginning//low-beginning distinction of the proto system. In other words, viewed diachronically, the compound accent rule can be interpreted as a variation on the register preservation rule which existed in the proto language.
(21) Relationship between class mergers and register preservation
Class mergers in the Kagoshima dialect (representative of S-W Kyushu):
1-1.2 (A) // 3 (B)
2-1.2 (A) // 3.4.5 (B)
3-1.2.3 (A) // 4.5.6.7 (B)
Class mergers in the Iwate dialect (representative of the gairin type)
1-1.2 (Ⓐ) // 3 (Ⓐ)
2-1.2 (Ⓐ) // 3/4.5 (Ⓐ)
3-1.2.3 (Ⓐ) // 4.5/6.7 (Ⓐ)

Using the same logic, we are able to explain why register preservation does NOT hold in the Oki-no-shima dialects.

(22) Class mergers in the Oki-no-shima 3-pattern accent system dialects:
1-1.2 (B) // 3 (C)
2-1 (A) / 2.3 (B) / 4.5 (C)
3-1.2.3.4 (A) / 5 (B) / 6.7 (C)
The merger pattern (22) of the Oki-no-shima dialects is unique among the Japanese dialects, differing depending on the length of the word. Comparing it with (20) we observe that with 2-mora words or longer the historical // division is erased by a merger, and it can be considered that this is the reason why register preservation is not observed in compound words. The same can be said of the Chibu dialect (23).

(23) Class mergers in the Oki-no-shima 2-pattern accent system dialect, Chibu:
1-1.2 (B) // 3 (A=C)
2-1.4.5 (A=C) / 2.3 (B)
3-1.2.3.4.6.7 (A=C) / 5 (B)
Here too, merger across the // division causes register preservation to not hold.
The reason the Oki-no-shima dialects do not have register preservation is not because they are dialects with 3-pattern accent systems. Even in a 3-pattern accent system, if the merger pattern had been as in:

(24) 1-1.2 (A) // 3 (C)
2-1.2 (A) // 3 (B)/4 .5 (C)
3-1.2.3 (A) // 4.5 (B) / 6.7 (C)
(or ...//4(B)/5.6.7(C), ...//4.5.6(B)/7(C) etc.)
and the mergers had resulted in an A vs. non-A split (where B and C receive the same treatment), this would have resulted in an expanded register preservation in compounds (see also Iwate dialect (19, 21)).
(25) A → A, non-A → non-A (if B and C, then either B or C. B → C and C → B are both possible)

3.4.3 The presence/absence of register preservation in Ryukyuan dialects

When it comes to Ryukyuan dialects, there is as yet very little research which looks at compounds, but in the Kikai-jima dialects register preservation does not hold.

Examples from the dialect of Nakazato community are given in (26) (the utterance-final tone contour is identical to that of the Wan dialect (30, 31) spoken in a neighbouring community).

(26) Compounds in the Nakazato dialect, Kikai-jima
    mi[su α ‘miso’ + ?a[zi ‘taste’ α → [misu]a[zi α ‘miso flavour’
    ma[su α ‘salt’ → [ma]su[?a]zi β ‘salt flavour’
    so[o]yu β ‘soy sauce’ → [soo]yu[?a]zi β ‘soy sauce flavour’
    sa[t’a]a β ‘miso’ → [sat’a]a[?]a[zi β ‘sugar flavour’
    mi[du α ‘water’ → [midu]ka[gi]N β ‘quantity of water’
    yu[u α ‘hot water’ → [yuu]ka[gi]N N β ‘temperature of hot water’

Adding in further data, on the whole the result is that α → α is the minority, α → β is common, and there are few instances of β → α. For example, compounds formed with the initial component si[ma α ‘island, local’ such as -?ut’a ‘song’, -yumit’a ‘language’, -husu ‘chili’ (all α when not compounded) and -toohu ‘tofu’, -banana ‘banana’, -mik’an ‘mandarin’ (all β when not compounded) are all β. In other words, regardless of the compound-initial component, most compounds are β. In this dialect the compound accent rule (register preservation) does not apply.

Matsumori (2011b) hypothesises that, in the Kikai-jima dialects, words of 4 or more moras’ length tend to fall into one accent pattern, so, with this in mind, this skewed distribution (in this case, favouring β) in (long) compounds in the Nakazato dialect requires further investigation.

In addition to clarifying this skewed distribution, in order to clarify whether register preservation was lost due to this skewed distribution, or whether there never was register preservation, it is necessary to consider the conditions under which register preservation holds in the Ryukyuan dialects.
3.5 Consistency of accent classes within the conjugation

3.5.1 Dialects with consistency of accent classes within the conjugation and dialects lacking it

It has been known since Polivanov (1976[1928]: 55-57) and Hirayama (1951: 130f.) that, in the 2-pattern accent systems of south-west Kyushu, conjugation forms (including derivations such as the causative and passive) are consistently A or B depending on the root (refer to (6) for some examples). For example, if we know *u[re]ba* ‘if (s.o.) sells’ or *tora[sut* ‘cause to take’, we can correctly predict that the passive forms will be accented as *u[ra]rut* and *tora[rut*, respectively.

We know that the Kyoto dialect of the late 11th century also had register preservation in conjugation forms, so that a high-beginning word would be high-beginning in all its conjugation forms, and a low-beginning word would be low-beginning in all its conjugation forms, and so we see this reflected in the 2-pattern accent dialects of Kyushu.

However, here too we see that the Oki-no-shima and Kikai-jima dialects do not follow the rule.

In the Oki-no-shima dialects with a 3-pattern accent system, the conclusive form, *-nu* negative, *-zu* negative, past tense, conditional and imperative forms of the verbs *asobu* ‘play’, *ateru* ‘hit’ (both A) and *deru* ‘exit’, *hairu* ‘enter’ (both C) have consistency of accentual classes in all of these forms, but this is not the case in the examples in (27).

(27) "Exceptions" to conjugation consistency in Dōgo, Oki-no-shima

- kaku C ‘write’ → kaka B ‘write-NEG’
- uku A ‘float’ → uke B ‘float-IMP’
- niru A ‘boil’ → nita B ‘boil-PAST’, nii B ‘boil-IMP’
- okiru B ‘get up’ → okizuni C ‘get up-NEG-CONJ’, okita C ‘get up-PAST’, okii C ‘get up-IMP’

These “exceptions” to consistency of accent classes actually have an historical explanation.\(^\text{13}\) Firstly, that *kakan* ‘write-NEG’, *uke* ‘float-IMP’, *nita* ‘boil-PAST’ and *nii* ‘boil-IMP’ are B is due to the proto-forms in (28) (segmental aspects of the forms are given in their modern forms) having undergone the same regular accent class mergers that nouns underwent.

(28) Accentuation of conj. forms of the proto mainland-Japanese system

\[
\begin{align*}
**ka[ku, **kaka[nu, **ka[ka]zuni, **ka[i]ta, **ka[ke]ba, **ka[ke]] & ‘write’ ‘ -NEG’ ‘ -NEG-CONJ’ ‘ -PAST’ ‘ -COND’ ‘ -IMP’ \\
\end{align*}
\]

Next, *okiru* B ‘get up’ — *okizuni* ‘get up-NEG-CONJ’, *okita* ‘get up-PAST’, *okii* ‘get up-IMP’ (all C) — were similarly formed by regular application of historical processes.
(29) **oki[ru, **oki[nu, **o[ki]zuni, **o[ki]ta, **oki[re]ba, **o[ki]i

‘get up’  ‘-NEG’  ‘-NEG-CONJ’  ‘-PAST’  ‘-COND’  ‘-IMP’

In other words, that the conjugation forms in the Oki-no-shima dialects lack
accentual consistency is the result of regular sound changes, and it would be
unnatural if there were synchronic accentual consistency. The same can be said
of the Chibu dialect of Dōzen, a 2-pattern Oki-no-shima dialect. In the case of
this kind of dialect, it is impossible to synchronically derive all conjugation forms
from one underlying stem.

3.5.2 Examples from Ryukyuan dialects

As an example from Ryukyuan, we will move to the conjugation forms of Kikai-
jima, giving forms from the Wan dialect (Uwano 1995, 1997). The conclusive
and attributive verb forms in (30, 31) are phonologically identical, but in the β
class there is a difference between them in utterance-final and non-utterance-
final contexts. Below du[k‘i] is the noun ‘time’ and thus means ‘when ~’, and the
so-called te-form also expresses past tense.

(30) Conjugation forms from the Wan dialect (α class)

| ‘wind’     | [ma]c’i[u][N] | ‘sleep’    | [nim]bi[N] |
| ‘wind-time’| [ma]c’i[u](du[k‘i]) | ‘sleep-time’ | [nim]bi[N(du)[k‘i]] |
| ‘wind-PAST’| [ma][c’i], [ma][c’ja][N] | ‘sleep-PAST’ | [nit][t’i], [nit][t’a][N] |
| ‘wind-PAST-time’ | [ma][c’ja][N(du)[k‘i]] | ‘sleep-PAST-time’ | [nim][t’a][N(du)[k‘i]] |
| ‘wind-NEG’  | [ma][k’][a][N] | ‘sleep-NEG’ | [nim][ba][N] |
| ‘wind-NEG-time’ | [ma][k’][a][N(du)[k‘i]] | ‘sleep-NEG-time’ | [nim][ba][N(du)[k‘i]] |
| ‘wind-COND’ | [mak’i][ba][a] | ‘sleep-COND’ | [nim][bi][ba][a] |
| ‘wind-IMP’  | [ma][k’i] | ‘sleep-IMP’ | [ni][n][bi] |
| ‘wind-NEG.IMP’ | [ma][k’][u][na] | ‘sleep-NEG.IMP’ | [nim][bu][na] |
| ‘wind-VOL’  | [ma][k’][o][o] | ‘sleep-VOL’ | [nim][n][bo][o] |

The volitional form of α verbs appears with the β contour. (If α, *[ma][k’][o][o],
*[nim][bo][o] would be expected.)

(31) Conjugation forms from the Wan dialect (β class)

| ‘write’    | ka[c’u][N] | ‘get up’ | [wi][j][ru][N] |
| ‘write-time’  | ka[c’u][n(du)[k‘i]] | ‘get up’-time’ | [wi][j][ru(du)[k‘i]] |
| ‘write-PAST’ | ka[c’i], ka[c’ja][N] | ‘get up’-PAST’ | [wi][t’i], [wi][t’a][N] |
| ‘write-PAST-time’ | ka[c’ja][n(du)[k‘i]] | ‘get up’-PAST-time’ | [wi][t’an(du)[k‘i]] |
| ‘write-NEG’  | ka[k’a][N] | ‘get up’-NEG’ | [wi][r][a][N] |
| ‘write-NEG-time’ | ka[k’a][n(du)[k‘i]] | ‘get up’-NEG-time’ | [wi][r][a(n(du)[k‘i]) |
| ‘write-COND’ | ka[k’i][ba][a] | ‘get up’-COND’ | [wi][ri][ba][a] |
| ‘write-IMP’  | ka[k’i] | ‘get up’-IMP’ | [wi][ri] |
| ‘write-NEG.IMP’ | ka[k’][u][na] | ‘get up’-NEG.IMP’ | [wi][r][u][na]. [wi][n][na] |
| ‘write-VOL’  | ka[k’][o][o] | ‘get up’-VOL’ | [wi][ro][o] |

Among the forms of the β verbs, the conditional form alone takes the third
accent pattern, γ. (If β, it should be *[ka][k’][i][ba][a], *[wi][ri][ba][a].)
The reason for the appearance of the inconsistent pattern and the third accent pattern is unknown, but the reason for the systematic appearance of the third accent pattern (γ) in the progressive form of verbs (32) is clear.

(32) Wan dialect progressive aspect

<table>
<thead>
<tr>
<th>Unmarked aspect</th>
<th>Progressive aspect (progressive, perfect)</th>
</tr>
</thead>
<tbody>
<tr>
<td>α: [tu]bi[N] 'fly'</td>
<td>tu[du]ri 'is flying; has flown'</td>
</tr>
<tr>
<td>[ʔuk]u[r][i][N] 'send'</td>
<td>[ʔu]k'u[t][u]ri 'is sending; has sent'</td>
</tr>
<tr>
<td>β: nu[mi][N] 'drink'</td>
<td>[nu]du[ri] 'is drinking; has drunk'</td>
</tr>
<tr>
<td>[nu]ba[su][N] 'stretch'</td>
<td>nu[bac'ju]ri 'is stretching; has stretched'</td>
</tr>
</tbody>
</table>

The progressive form of β verbs like /nuduri/ has a rising accent kernel on the antepenultimate mora (‒③) — the γ accent pattern, which is not attested on nouns. The progressive form of α verbs such as /tu[duri]/ has its accent kernel on the penultimate mora (‒②), which is the position of the accent kernel in the β class. In both cases the accent pattern of this form is not consistent with the other forms in the conjugation. From these data we recognize that verbs have a 3-pattern accent system. The forms in (32), with inconsistent accent patterning, were formed historically as in (33).

(33) The origin of progressive aspect accentuation

| tu[du]ri β      | *tu[di α + wu[ri 'be'] |
| [ʔu]k'u[t][u]ri β | *[ʔu]k'[i][α + wu[ri 'be'] |
| [nu]du[ri γ]     | *nu[du][ri 'be'] |
| nu[bac'ju]ri γ   | *nu[bac'β + wu[ri 'be'] |

In the α verbs, the rise of pitch on the ultimate mora (which was not an accent kernel) of the infinitive form was used before the following breath group (wu[ri]) with a hiatus, and it became fixed and functioned as if it were an accent on the ultimate mora. The -i of the infinitive then fused with the wu of wuri, and the remaining ri lengthened the word by one mora, so that the result was an accented penultimate mora, or a β class pronunciation. With β class verbs, the same fusing of two words took place and the originally penultimate accent ended up in the antepenultimate position, giving rise to the γ class.

3.6 Summary

Here I will summarise the results of the above consideration of how the four characteristics typically observed in the 2-pattern accent systems of Kagoshima appear in other N-pattern accent systems. Firstly, [1] the breath-group-centred nature is the characteristic which is most widely observed in N-pattern accent systems. There are some accentually independent yet syntactically dependent forms, but these are elements which do not participate in breath-group formation. [2] Serialisation has exceptions in (certain series in) a number of dialects. These are cases where the locus of the accent is specified from the end of the free form at the word level (and not at the level of the breath-group).
In contrast, [3] the compound accent rule and [4] consistency of accent patterns within the conjugation (i.e. “register preservation in compounds” and “register preservation in the conjugation”, respectively) have many exceptions in both mainland Japanese and Ryukyuan and so are difficult to interpret as general characteristics of N-pattern accent systems. Conversely, because essentially the same rules are also found in dialects with multi-pattern accent systems, it can be said that, at least as far as mainland Japanese is concerned, whether or not these rules exist in a particular dialect depends on whether accent changes (accent class mergers) occurred which obscured the register preservation rule of the proto system.

Additionally, independently of accent class mergers, it is possible that exceptions to [3] the compound accent rule are due to a skewing in the distribution of the number of words in accent classes among long words. As for [4] accent consistency in conjugation forms, exceptions and the formation of new accent patterns arise due to fusion of morphemes. In the field of Ryukyuan dialects, where the linguistic history is still unclear, [3] and [4] are unresolved issues.

4. The formation of N-pattern accent systems
In this section, looking at Kyushu and Oki-no-shima dialects, I shall consider how N-pattern accent systems formed. There is insufficient space to take on the whole topic here, so I shall choose several dialects from those which I have conducted fieldwork on and will use 5-mora long breath groups as representative forms. For the 2-pattern accent systems of Kyushu, I will deal with the Fukiage-chō, Makurazaki and Kuroshima-Ōsato dialects (Uwano 2000, 2007) and the Nagasaki dialect. I will refrain from such details as exceptional phenomena and whether the relevant prosodic unit is the mora or the syllable, and I shall give only my opinions and not refer to or critique prior research.

4.1 The formation of the 2-pattern accent systems of Kyushu
4.1.1 The proto system of the south-western Kyushu 2-pattern accent systems
I believe that the proto form of the A pattern developed due to the following change from the mainland Japanese proto system’s falling register (Uwano 1988, 2006).

(34)  

<table>
<thead>
<tr>
<th>Proto mainland acc. system</th>
<th>Proto system of 2-pattern acc. systems</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>[〇〇]!〇〇〇</strong></td>
<td>*[〇〇]〇〇〇</td>
</tr>
<tr>
<td><strong>[〇〇]!〇〇〇〇</strong></td>
<td>*[〇〇]〇〇〇〇</td>
</tr>
<tr>
<td><strong>[〇〇]〇〇〇〇</strong></td>
<td>*[〇〇]〇〇〇</td>
</tr>
<tr>
<td><strong>[〇〇〇]〇〇〇</strong></td>
<td>*[〇〇〇]〇〇〇</td>
</tr>
<tr>
<td><strong>[〇〇〇〇〇]</strong></td>
<td>*[〇〇〇〇〇]</td>
</tr>
</tbody>
</table>

The half fall ( ! ) of the falling register changed to the normal fall ( ) and any following falls in pitch (accent kernels) were lost, and a fall in pitch immediately
after the first mora moved one mora to the right. These changes are sufficient to produce the proto form of the A pattern. It is thought that accents which existed on particles and auxiliaries (included in (34)) were lost in the process and these dependent forms attached onto the free forms. If this view is correct, the proto form of the A class, *[〇〇]〇〇〇, would have formed very quickly. It should be noted that in the various gairin-type dialects the various high-beginning accent patterns in the proto system all merged as the unaccented pattern. This A pattern is marked on the beginning part of forms (first two moras high), so even if it were formed on the word (and not the breath group), serialisation would have resulted.

The situation for the B pattern is not so simple. The relevant forms are the postulated low-beginning forms in the mainland Japanese proto system, which are numerous (35).

(35) **〇[〇〇〇〇], **〇[〇〇〇〇], **〇[〇〇〇〇], **〇[〇〇〇〇], **〇[〇〇〇〇], **〇[〇〇〇〇], **〇[〇〇〇〇], **〇[〇〇〇〇],


(and **[〇〇〇〇〇 may also be included)

There are many possible intermediary forms, but the main developments are thought to be the following.

When the A class had a falling tone contour, the B class, which was in competition with the A class, underwent a similar change (Uwano 1987: 62) to that which produced the Sanuki-type dialects (1-1/2/3, 2-1.3/2/4.5 (Uwano 1985)), and so changed to a single contour very similar to that of the Tokyo dialect (especially its unaccented contour). In other words, the forms in (35) all changed to a pronunciation where the first mora was not so low, and the pitch of the second mora rose slightly (represented as 〇%〇〇〇〇). With this the contrastive location of the pitch rises in (35) was lost (e.g. **〇[〇〇〇〇] and **〇〇〇〇〇〇 merged into *〇%〇〇〇〇), and the remaining *〇%〇〇〇〇, *〇%〇〇〇〇, *〇%〇〇〇〇, *〇%〇〇〇〇 came to be distinguished only by the location of the fall in pitch. Next, the fall in pitch ( ] ) was delayed repeatedly resulting in further mergers, taking in the originally dependent words, resulting in *〇%〇〇〇〇 as the proto form of the B class of 2-pattern accent systems. B originally had more patterns and was more complicated, but delayed fall in pitch continued unceasingly, and so it is thought that the change to the proto form *〇%〇〇〇〇 occurred relatively rapidly.

Thinking in this way, after this proto form, all of the 2-pattern accent systems except the Nagasaki-type underwent a delay in the implementation of the half-rise ( % ) and this changed into a clearer full-rise ( [ ] ).

Taken as a whole, there appears to be no reason to assume that, on the way to the establishment of the 2-pattern accent systems, there was an intermediate lengthy period of a stable 4-pattern or 3-pattern accent system.
4.1.2 From the Kyushu proto 2-pattern accent system to the various dialects

Below (36-39) I give the main intermediate stages in a broad transcription, which allows a range of interpretation. In the Fukiage dialect and others, it is also possible that the proto system immediately changed to a system where one mora became prosodically prominent (i.e. \( *ka[za]guruma \)), and from that changed to \( *kaza[gu]ruma \) and then \( kazagu[ru]ma \). Also, although different forms for A and B may be aligned below, this does not necessarily mean that the two pitch contours are contemporaneous. However, some parts of the following have conditions attached. For example, in the Makurazaki dialect, so long as the B pattern alone has a half-fall (\( ! \)), the period of the prior two-pitch-peak-type tone contour must have existed before the same contour arose in the A pattern, and the prior final-mora-high form must also not be contemporaneous with the same contour on the A words. The transcription has been standardized.

(36) Fukiage-chō dialect
   B: \( *ya%maotoko = yamaoto[ko] \)

(37) Makurazaki-city dialect
   A: \( *[kaza]guruma > *ka[zagu]ruma > *kaza[guru]ma \)
   B: \( *ya%maotoko = yamaoto[ko] \)

(38) Kuroshima-Ōsato dialect
   B: \( *ya%maotoko = yamaoto[ko] \)

(39) Nagasaki-city dialect
   B: \( *ya%maotoko = ya%maotoko \)

Thinking in this way, the Nagasaki-type can be said to be very close to the proto form. Also, according to Kibe (2000), the accentuation of Gonza, a man from the Kagoshima region whose boat drifted to Russia in the 18th century, was such that the A pattern was that of the modern-day Nagasaki type and the B pattern was of the modern-day Kagoshima type, so changes in the B pattern took place at a faster pace.
4.2 The formation of the 3-pattern accent systems of Oki-no-shima

Firstly, I postulate the change from the proto mainland system to the proto Oki-no-shima system as having taken place as in (40).

(40) Proto mainland acc. system                Proto Oki accent system
1-1 **[〇!] > *[〇]]] = *[〇]]] B
2 **[〇]] = *[〇]]] = *[〇]]] B
3 **〇_] > *[〇]⑬] = *[〇]⑬ C
2-1 **[〇〇!] > *[〇〇]]] > *〇[〇]]] A
2 **[〇〇] = *[〇〇] = *[〇〇] B
3 **〇〇_] > *[〇〇] = *[〇〇] B
4 **〇[〇] = *〇[〇] = *〇[〇] C
5 **〇[〇]] = *〇[〇]] > *〇[〇] C
3-1 **[〇〇]⑳ > *[〇〇]]] > *〇[〇]]] A
2 **[〇〇] = *[〇〇]]] = *〇[〇]]] A
3 **[〇〇〇] > *[〇〇〇] = *〇[〇〇] A
4 **〇〇〇_] > *[〇〇〇] = *〇[〇〇] A
5 **〇〇[〇] > *[〇〇]⑴ = *[〇〇] B
6 **〇〇〇] = *〇[〇〇] = *〇[〇〇] C
7 **〇〇[〇] > *〇[〇〇]]] > *〇[〇〇] C

The proto Oki accent system (41) formed in this way was a 3-pattern accent system with two accented patterns (one accented on the second mora (②) and one accented on the first mora (①)), and a third pattern that was unaccented (⑬). Long forms which included particles and auxiliaries also underwent the changes in (40), so it is thought that the establishment of the breath-group-centred nature of accentuation was complete by then. Therefore words longer than three moras in length also underwent these changes. However, monomoraic A words had already merged with B in the proto system.

(41) Proto system of the Oki-no-shima dialects
    ‘wind’ ‘fish’ ‘rich person’
    ‘handle’ [mountain’ ‘mind’ ‘morning glory’
C: *[e *[a]me *[u]sagi *ni[watori] ⑰
    ‘picture’ ‘rain’ ‘rabbit’ ‘chicken’

From this proto system the modern Oki-no-shima dialects were derived by delayed implementation of falls (⑴) and rises (⑲), and by raising of the beginning of words (conditioned by the locus of rise in the word). This is sketched in (42) for representative dialects, including the 2-pattern accent system of the Chibu dialect. The symbol ✒ at the end of a line in the table signifies that that line continues on to the line-initial ✒ later in the same section. For example, in the case of the A pattern words, the third line ending with ✒ continues on to the next line for the Igo dialect, but skips this line and continues
on to the fifth line (beginning with ※) for the Kumi and Chibu dialects, and the changes in the Nakamura dialect continue from the fifth line.

(42) Changes from the Oki proto system

Proto system A pattern

\[
\begin{align*}
*\text{ka}[\text{ze}] & \quad *\text{sa}[\text{ka}]\text{na} & \quad *\text{ka}[\text{ne}]\text{moci} \quad ② \\
(> *\text{ka}[\text{ze}]) & \quad *\text{sa}[\text{ka}]\text{na} & \quad *\text{ka}[\text{nemo}][\text{ci}] \quad \text{(this stage is optional)} \\
> *\text{ka}[\text{ze}] & \quad *\text{saka}[\text{na}] & \quad *\text{kane}[\text{mo}][\text{ci}] \quad ※ \\
> [\text{ka}][\text{ze}] & \quad [\text{sa}][\text{ka}[\text{na}]] & \quad [\text{ka}][\text{nemo}][\text{ci}] \quad \text{Igo} \\
※ > \text{ka}[\text{ze}] & \quad [\text{sa}][\text{ka}[\text{na}]] & \quad [\text{ka}][\text{ne}[\text{mo}][\text{ci}] \quad \text{Kumi, Chibu} \\
> \text{ka}[\text{ze}] & \quad [\text{sa}][\text{ka}[\text{na}]] & \quad [\text{ka}][\text{nemo}][\text{ci}] \quad \text{Nakamura} \\
\end{align*}
\]

Proto system B pattern

\[
\begin{align*}
*[\text{e}] & \quad *[\text{ya}]\text{ma} & \quad *[\text{ko}][\text{koro}] & \quad *[\text{a}][\text{sagao}] \quad ① \\
>*[\text{e}] & \quad *[\text{ya}]\text{ma} & \quad *[\text{koko}][\text{ro}] & \quad *[\text{asa}][\text{gao}] \quad ※ \\
> *[\text{e}] & \quad [\text{ya}][\text{ma}] & \quad [\text{ko}][\text{ko}][\text{ro}] & \quad [\text{a}][\text{sa}][\text{gao}] \quad \text{Kumi} \\
> *[\text{e}] & \quad [\text{ya}][\text{ma}] & \quad [\text{ko}][\text{ko}][\text{ro}] & \quad [\text{a}][\text{sa}][\text{gao}] \quad \text{Nakamura, Igo} \\
※ > *[\text{e}] & \quad [\text{ya}][\text{ma}] & \quad [\text{ko}][\text{ko}][\text{ro}] & \quad [\text{a}][\text{sa}][\text{gao}] \quad \text{Chibu} \\
\end{align*}
\]

Proto system C pattern

\[
\begin{align*}
*[\text{e}] & \quad *\text{a}[\text{me}] & \quad *\text{u}[\text{sagi}] & \quad *\text{ni}[\text{wato}][\text{ri}] \quad ① \\
>*[\text{e}] & \quad *\text{a}[\text{me}] & \quad *\text{usa}[\text{gi}] & \quad *\text{niwa}[\text{tori}] \quad ※ \\
>*[\text{e}] & \quad *\text{a}[\text{me}] & \quad *\text{usa}[\text{gi}] & \quad *\text{niwato}[\text{ri}] \\
> \text{ˇe} & \quad [\text{a}][\text{me}] & \quad [\text{u}][\text{sa}[\text{gi}]) & \quad [\text{ni}][\text{wato}[\text{ri}] \quad \text{Kumi} \\
> \text{ˇe} & \quad [\text{a}][\text{me}] & \quad [\text{usa}][\text{gi}] & \quad [\text{niwato}][\text{ri}] \quad \text{Nakamura, Igo} \\
※ > *[\text{e}] & \quad *\text{a}[\text{me}] & \quad *[\text{u}][\text{sa}[\text{gi}] & \quad *[\text{ni}][\text{wa}[\text{tori}] \\
> *[\text{e}] & \quad *\text{a}[\text{me}] & \quad *[\text{u}][\text{sa}[\text{gi}] & \quad *[\text{ni}][\text{wa}[\text{tori}] \quad \text{Chibu (merged with A)} \\
\end{align*}
\]

Supplementary Note

This paper is based on a presentation with the same title which I gave as the introductory lecture at the public symposium “Principles and origin of N-pattern accent systems” held at Kōbe University on 21st May, 2011. Because of this it overlaps somewhat with Uwano (1984a,b), but where possible I have used examples from different dialects. The section “N-pattern accent systems and word accent” from my presentation handout will, together with outstanding research issues of N-pattern accent systems, form a separate paper. In response to referees’ comments I have added more detail to the explanations and added many references. Timothy Vance kindly helped with the English language abstract. I would like to refer readers to a related paper of mine, “Accent in some Kikai-jima dialects of Ryukyuan with particular reference to nouns in central and southern dialects” which is due to be published in issue 142 of Gengo Kenkyū. Finally, this paper is part of research supported by the Grant-in-aid for Scientific Research (Basic research B) for the project “General Study on N-pattern Accent in Japanese” (Principal researcher Nobuko Kibe).
Notes

1. However, it seems that this typological classification was not Hirayama’s main concern. It does not appear in the accent system distribution maps in his series of publications, and it is difficult to pin down its first usage. The term “multi-pattern tone contour” is found in Hirayama (1957: 314), but it is unlikely that he intended a hard and fast classification. It seems the classification is first clarified in Hirayama & Nakamoto (1964), which deals with Ryukyuan.

2. The fact that the multi-pattern accent system of Tokyo has “3-patterns” for bimoraic nouns possibly led Hirayama to classify 3-pattern accent systems as multi-pattern accent systems. See Hirayama et al. (1966: 13).

3. Below, syllable-final y is used in place of the normal i to indicate that it is non-syllabic. ç is also non-syllabic.

4. Additionally there is the type where a dependent word dominates a free form (as in the Kikai-jima dialects’ dependent form gurai meaning ‘approximately’ (Uwano 2002)), which is an exception to the breath-group-centred nature of accentuation.

5. Please note that in this paper I have reversed the A and C of earlier publications of mine and of the symposium handout. I hesitated to make this change as it has the potential to cause confusion among those who use my earlier papers or other publications which refer to them, but I decided to go ahead and modify the labelling to reflect the historical classes for future convenience and to be consistent with other papers on this issue.

   This change is only a matter of labelling and has absolutely no effect on the content. The reason for the labelling in my earlier publications is that I was then viewing the A pattern in the Gokamura dialect as unaccented, and I was following the normal practice of ordering the unaccented pattern first. I was also influenced by the fact that Haruhiko Kindaichi, who created the classified vocabulary list (classified according to accentual class), used the same order in his own work on the historical development of Oki accentuation (Kindaichi 1972) – probably for the same reason as I did. Readers are also referred to Uwano (1983: note 9; 1984b: note 2).

6. However, this is in the end no more than a label, and there is no rule which says that it must be changed for each cognate relationship. With the same A/B grouping, there is much variety in the actual situations, and there is no guarantee that the vocabulary classes taking A or B in one dialect correspond to those in another dialect. A/B also does not correspond to the A/B in an A/B/C system.

7. Translated into a different framework, it would mean that accent, in the narrow sense of the word, and word tones coexist in the same system.

8. I first separated the “breath-group-centred nature” and “serialisation” in Uwano (1984a), but, in the Miyanoura dialect of Yaku-shima, which I gave examples of in that paper, in the A pattern the high tone is fixed on the word-initial mora (i.e., the breath-group-initial mora) and thus serialises, but in the B pattern the high tone is on the word-final mora, not the breath-group-final mora, so serialisation does not hold. In the case of the A pattern, because the high tone is located relative to the beginning of the word, there is no way to determine whether the relevant domain is the word or the breath group.
9 With this tone contour, the vowel \( u \) becomes semi-long, and there is a fall in pitch within this vowel.

10 Haruhiko Kondaichi named it “\textit{gairin} Tokyo-type”, but I refer to it as the “\textit{gairin}-type”, leaving out reference to the “\textit{Tokyo-type}” because “\textit{Tokyo-type}” has so many meanings (Uwano 1987). The same applies to the “\textit{nairin-type}” and “\textit{chūrin-type}”. These three types are the result of having undergone different historical changes.

11 According to Matsuura (2008), in the Nagasaki city dialect, register preservation holds in compounds when the compound-initial component is under 3 moras long, but when 3 or more moras long, even if A, the compound becomes B. Looked at from class mergers, it is certain that the Nagasaki city dialect once had register preservation, but due to a skewing of the distribution of forms in favour of the B pattern (see §3.4.3), the dialect is in the process of losing the compound accent rule. In passing I note that the B pattern I heard in the suburbs of Nagasaki city some 10 years ago differed from that of Kagoshima dialect and was close to the unaccented contour of the Tokyo dialect. This is in agreement with what Matsuura (2008) reports. However, what Matsuura reports as \([\text{a}]{\text{me}}\) ‘candy’, I heard as \([\text{ame}]\).

12 In a squib in the \textit{Journal of the Phonetic Society of Japan} (Vol.15 No.3), Akiko Matsumori reports that register preservation holds “in principle” in the Oki dialects. I will have to leave my comments on this to another occasion.\(^d\)

13 What follows amends what I gave in Uwano (1984a) by introducing the falling register. In order to distinguish proto forms, proto Oki forms are preceded by *, and the older proto mainland forms are preceded by **, following an old tradition. As this is sufficient to capture relative age, I have avoided using ***.

14 \( \text{k[Ɂ]i} \text{ba} \) etc. possibly derives from *\( \text{ka}[\text{k}^\text{i}] \text{ba} \) with vowel lengthening. Vowel lengthening influencing the tonal contour is often observed in diminutive forms among others. However, even if the volitional form \( \text{ma[k}^\text{o}] \text{a} \) and others are explained in this way, \([\text{mak}^\text{Ɂ} \text{a}]\) is problematic.

15 At the symposium I explained that, independently of the A pattern in (34), the class mergers in (35) progressed resulting in the proto form of *\( \text{〇〇〇〇} \text{[〇]} \) for the B pattern, but at this stage, because the Nagasaki and other dialects still retained a falling register for the A pattern, they underwent the same type of change that the Sanuki-type dialects had undergone to produce *\( \text{〇%〇〇〇〇} \). What I have proposed in this paper avoids this two-step process. Also, I believe it would be difficult to maintain a contrasting function with the A pattern falling register after reaching *\( \text{〇〇〇〇[〇]} \). However, a problem remains. Prior researchers, from Polivanov on, have reported that the B pattern of the Nagasaki dialect has a tone contour similar to that of the Kagoshima dialect (e.g. Nagasaki dialect (Mie-son) \( \text{hana-ka[ra]} \) ‘flower-from’, \( \text{hana-saka-} [\text{zii} \ ‘\text{Hanasaka-jīsan (old man in a fairy tale who made withered trees bloom)}\)’, etc.). How one interprets this will have a major effect on the historical interpretation. (It can be noted that Polivanov interprets A as having only the final prosodic unit low so that the contrast is between a rise or fall at the end of the breath group.) However, no matter how we interpret it, I do not follow the traditional route of *\( \text{〇〇〇〇[〇]} \) > *\( \text{〇〇〇〇〇[〇]} \) > [〇〇〇〇〇].

16 Unlike all of the other changes here, it is difficult to say that this change is natural, so I will explain further. At the stage of the proto mainland system, if one does not assume that there was a gentle rise in pitch within a mora, different
from the sudden rise within the mora which was later annotated with the departing tone (and such a gentle rise is in itself problematic when the system as a whole is looked at), it seems that the only possible explanation is that [e ‘picture’] arose out of a somewhat unusual change as a result of the same breath-group-centred nature and serialisation that gave e-[ga ‘picture-SUBJ’] the same pitch contour as a[me ‘rain’].

This change is not particularly unusual. The intermediate stage would be that, while maintaining the pitch rise on the second mora, the initial mora was stressed and changed from a mid pitch to a falling pitch (%〇)]%〇). This intermediate pitch contour is attested as a stable pattern in the Shitooke dialect on Kikai-jima. It is also observed in the Noto-jima dialect in Ishikawa pref. among others. Passing through this stage (and not going through an all low stage) it can change to [ka]ze.

Translator’s notes
a) Hereafter /c/ is used to represent [tʃ] before /i, j/ and [ts] elsewhere.
b) The Fukiage dialect accentuation is here represented primarily on otherwise standard Japanese forms, and the actual corresponding dialect words are given in parentheses. The syllable final /t/ is not released.
c) Gairin is Japanese for ‘outer circle’. Nairin is ‘inner circle’ and chūrin is ‘middle circle’, so named because the dialects with characteristic merger patterns of each type are found in concentric circles surrounding the Kyoto/Osaka-type dialects.
d) These comments have since been published in 2018 in “San-kei-akusento-to shiki-hozon” [3-pattern accent systems and register preservation] in Takuya Okimori (ed.) Rekishi-gengogaku-no Shatei [The scope of historical linguistics] 217-230 (Sanseidō).

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**ORIGINAL PAPER**


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