Exploring Language through Contrast

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Edited by

Waldemar Skrzypczak, Tomasz Fojt
and Sławomir Wacewicz

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Part Six: Normative Linguistics

PREFACE

The present volume aspires to portray a panorama of recent linguistic research in Poland. The principle that shaped its contents draws upon the concepts of *comparison* and *juxtaposition* as driving forces in an attempt to grasp descriptive and explanatory aspects of linguistic use and organization. The spectrum of contributions is broad and spans all the levels of language, from phonology to discourse. The constellation of methodological perspectives is equally varied, as the book includes papers that lean upon some versions of the generative theory, as well the recent developments in cognitive linguistics, synchronic and diachronic perspectives, and a measure of freedom has also been allocated to papers written in a more traditional structurally-oriented and/or eclectic spirit. However, the ideas of comparison and contrast have been the common denominator in the service of explicating the central and the focal from what is fuzzy and nebulous.

The section on phonology features two papers. The first concerns horizontal bonds between phonological primes, element-to-element relations within non-linear models of segmental representation. It is argued, on the basis of examples from Bukusu and Sundanese, that inter-element bridging and status alignment help to clarify the consonant harmony phenomena. The second paper focuses on Old English i-umlaut. It shows how the evolution of views and theoretical surroundings on the nature of sound change influences the way in which historical data are handled.

The section on morphology and word-formation presents such issues as grinding, diminutives, suffix distribution and compound nouns. The paper on grinding addresses the question of the status of nominal number as an inflectional category, and how recategorization from count to mass nouns is conditioned. The paper on diminutives aspires to grasp the conditions for an unambiguous set of criteria that would satisfy the definition of the issue in question. The paper on the distribution of the suffix *–ness* across registers calls for the parallels between systematic patterns of variation in language use and proportions in the application of the *–ness* derivative. Drawing upon corpus data the Author identifies distributional preferences between two stylistically polarized extremes, i.e. fiction and academic prose. The contribution on synthetic compound nouns focuses on the explanatory power of argument assignment in the

hierarchical morphological structure of words and morphology-syntax interface. This detailed account contributes significant observations and addresses new questions in the area of derivational morphology.

The section on syntactic phenomena is comprised of three papers, addressing respectively: grammatical constructions with *locatum* verbs, the status of English NPN forms and typology of Old English verbs. The opening paper is a contribution on secondary patterns with *locatum* verbs with regard to their distributional characteristics and sheds new light on the relationship between literal and metaphorical senses of fairly stable and predictable grammatical constructions emerging from valency potentials of selected *locatum* verbs. The result of rigorous and well-documented data analysis is followed by an inevitable reflection on gradability of metaphor. The second paper discusses the status of NPN forms with regard to categorial status, internal structure and distributional properties. The Author presents two competing views between NPN as a construction (which in fact violates the X-bar schema) and NPN as a lexical item, where the mechanism of syntactic reduplication is assumed to be at play. It is concluded that "comparing two competing approaches can be beneficial", as such a situation fuels research and exchange of ideas between different linguistic orientations. The next contribution is devoted to some clarifications regarding the typology of Old English verbs with regard to complementation frames. The Author proposes interesting innovations to existing approaches. As a result, the dynamicity of OE verbal complementation can be manifested by a varying number of complements, it exhibits variation with regard to morphological categories of their objects and displays coexistence of more than one argument type, e.g. Case-marked NP or clause and a PP.

The section on semantics opens with a discussion of possible explanations regarding the "slips-of-the-tongue" phenomena. The Author elegantly clarifies the issue in view of The Conceptual Integration Theory and Relational Network Model, and provides explanations that account for phonological, lexemic, syntactic and semantic blunders, bringing to attention such elements as competing plans, distractors and forward planning. Juxtaposition of meanings in puns, in the next paper, is yet another attempt to bring focus onto the contrasting principle, where identical forms display dissimilar meanings, which, in turn, produce humorous results in conversational witticisms, newspaper headlines, jokes, etc. It is demonstrated how puns achieve relevance measurable in terms of processing effort and cognitive gains. In the next paper the question of Conceptual Metaphor Theory is revisited – in the spirit of revision. The Author argues against the "classical" model – as it has been known and

championed for decades in its well-established and celebrated form – and proposes a collostructional integrating approach, which does justice to novelty of meaning achieved through collocational/constructional environment of every lexical item plus contextual aspects. Juxtaposition and differentiation arises also in the paper on metaphorical senses in Old English lexical concepts for <fire> and <light> FYR and LEOHT. It draws upon the fundamental dualism between the two and aspires to assign to them domains of metaphorical applications reflecting some interesting aspects of the Old English conceptual universe along with axiological implications.

The area of pragmatic and discursive phenomena has gained the attention of a number of contributors and contrasts such polarities as: quality vs. tabloid newspapers, subjectification vs. objectification in viewing arrangement (also with regard to political discourse), viewing imposition through the anchoring of "the Self" of the textual narrator, as well as discourse goals and norms. The first paper in the section concerns the choice of rhetorical styles in the aforementioned types of newspapers, *The Guardian* and *The Daily Mail*, which are predefined by institutional contexts. The study of stylistic features is based on corpora. Even though the argumentative and generalized rhetoric of the former is juxtaposed against the more emotional and direct reporting of the latter, a gradual infiltration of tabloid style into the so-called quality press is to be observed. The paper on patient-centered and objectifying discourses presents the issue of two distinct strategies in meaning construction in medical case reports. A number of relevant features that display contrasts between the two modes have been identified, such as agent/patient allocation, the use of personal pronouns, the choice between passive and active constructions, etc. The paper addresses a very important issue within the domain of medical discourse speaking in favour of the patient-centered and empathy-driven type of discourse. The next contribution concerns discursive strategies in the media construction of Poland, Russia and the USA in the context of the debate on the US anti-ballistic missile defense shield in Polish and Russian quality papers. By exploring three main types of strategies: referential, predicational and proximization – it was established how the three aforementioned "social actors" vary with respect to changing contextual factors. *Authorial persona*, the Self, is the central question of the next contribution, where the Author explores the domain of pragmatic realizations of the Self, a semiotic subjective entity, in academic texts, in which the coding of interpersonal relationships and modelling social distance appear to be of fundamental significance. The section is concluded with an important paper on the application of

axiological parameters in conversational analysis. In order to capture highly varied and dynamic phenomena of spoken interaction, the Author employs a complex methodology that stems from a number of disciplines. Politeness and co-operation are but the tip of the ice-berg that in a broader context can shed light on such seemingly distant problems as those regarding the evolution of language.

The last paper in this volume seems to elude the architectural design of the book, but is equally important, and it also draws upon the principle of juxtaposition. We place it under the rubric of "normative linguistics", as it contrasts two individuals – a thespian (Stephen Fry) and a linguist (David Crystal) writing on modern-day prescriptivism. It shows how views and value judgements on both language change and correctness are voiced by these two individuals, and how, despite the two different backgrounds, they both display a comparable measure of sensitivity to linguistic issues.

Waldemar Skrzypczak
Tomasz Fojt
Sławomir Wacewicz

PART ONE

PHONOLOGY

FRIEND OR FOE?
ON SOME HORIZONTAL BONDS BETWEEN PHONOLOGICAL PRIMES

ANNA BLOCH-ROZMEJ

1. Introduction: the model and the aims

The major aim of this article is to provide some insight into the domain of element-to-element relations within one of the non-linear models of segmental representation, namely Government Phonology. It will be demonstrated that in certain systems neighboring elements can be friends, whereas in others, they are foes, both situations having their unique interpretational consequences. Below, a brief outline of the main theoretical concepts will be presented which we find crucial for the discussion of the linguistic phenomena to be analyzed in the remainder of this paper.

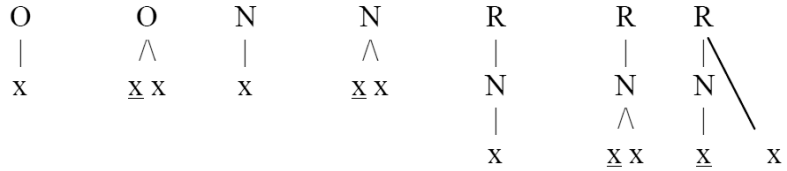
The phonetic interpretation of a phonological structure is an interplay of both prosodic and subsegmental factors, such as the prosodic strength of skeletal positions,[1] inherent nature of phonological primitives, their combinatorial possibilities as well as their status within melodic units. In the forthcoming presentation, we shall employ the framework of Government Phonology (henceforth GP, e.g. Harris 1994, Gussmann 2002, Cyran 2003), its *Element Theory* in particular, advocating an autosegmental concept of phonological representation and a privative nature of lexical oppositions. According to its compositional view of a segment, elements are the primitive units of melodic structure. They are monovalent[2] and autonomous, each having its unique phonetic interpretation. Accordingly,

[1] Within the model adopted here, i.e. Government Phonology, the prosodic strength of skeletal slots has to do with their licensing capacity. Licensing, in turn, is defined as an asymmetric relation between two positions of which one licenses, or authorises the presence of, the other. The head of a phonological domain, e.g. a word, constitutes the source of licensing potential for the whole domain.

[2] Unlike distinctive features which are binary valued. Elements are pronounceable, both individually and in combinations with other primes.

segments consist of either a single element or a combination of primes, where one of them can enjoy the dominant status of the head. A phonological representation is a sequence of onsets and rhymes headed by nuclei. Thus, the model recognizes only three phonological constituents: Onset, Nucleus and Rhyme. These constituents are constructed on the basis of licensing and governing relations contracted by adjacent prosodic positions. Constituent heads are also capable of entering into inter-onset and inter-nuclear relations, the contraction of which requires the fulfillment of more stringent conditions.[3]

(1) Constituents in Government Phonology[4]



Cross-linguistic evidence appears to corroborate the view that elements are capable of contracting certain types of relations, not only within segments and in local melody sequences, but also across longer stretches of a phonological representation. Such long-distance alliances happen to involve segments licensed by positions belonging to either inter-nuclear or inter-onset domains.[5]

The aim of this paper is to depict mechanisms underlying element interplay at a distance. More specifically, we shall dwell on the operation of **bridging** – a special type of inter-constituent relation that seems to

[3] One such condition can be the presence of a nuclear licenser of this relation. In some languages, for instance, this licenser has to be filled with a full vowel, whereas in others, it might be empty, i.e. possessing no active elements. As for the very constituents themselves, the licensing relations therein have to be left-headed.

[4] Heads (licensers/governors) are underlined. It has to be clarified here that within branching constituents of onsets and nuclei the relation is stronger and it is called government. Government is a more restrictive form of relation and it often manifests itself as a phonotactic restriction whereby the left-hand position restricts its right-hand neighbour.

[5] Notice that such relations involve constituents which are not strictly adjacent but are separated by other constituents. Within the current theoretical framework, these relations involve government or licensing by projection, i.e. one appearing at a higher level of phonological hierarchy.

foster segmental harmony (Bloch-Rozmej 2008).[6] We shall discuss evidence from two languages – Bukusu and Sundanese – to demonstrate the effects of element-to-element bonds. As already mentioned, identical elements licensed by certain positions within inter-constituent domains can be either friends or foes.

Our attention will be focused on the behavior of consonants which often appears quite puzzling as their elements contract bonds regardless of intervening melodies that separate them in the melodic plane (i.e. the sub-skeletal level). We shall employ the tools and mechanisms of Government Phonology to account for prime interactions in consonant harmony phenomena as well as their refusal to submit to harmony in specific contexts (e.g. those pinpointed in Gafos 1999 and Hansson 2001a, 2001b). In search of an adequate framework that is capable of accommodating the linguistic data, we shall propose certain refinements to the classical model of GP.

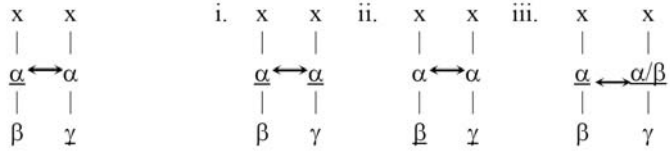
2. Horizontal bonds between elements

As far as the horizontal relations are concerned, we have to consider phenomena that pertain to segments occurring in a sequence. At this stage, it needs to be noted that element spreading falls outside of this category. Frequently when the notion of spreading is evoked, it is stereotypically envisaged as element movement from its host to some other segment, which would result in its duplication. Nevertheless, Government Phonology advocates a totally different understanding of spreading. As proposed in Harris (1994), spreading is defined as an interpretive phenomenon. More precisely, a spreading prime simply extends its range of interpretation to include more than a single segment. Put differently, the element becomes interpreted over a particular stretch of representation. Hence in spreading, quite clearly, there is no inter-element relation to speak of. The relations that we shall analyze in this article obtain between two lexically specified primes (i.e. ones that are independently licensed by different skeletal positions). On the whole, a two-way distinction can be made within the class of horizontal harmony relations: one that is completely identity-based and the other, status-based. The two respective types are schematized in (2a) and (2b) below.

[6] The concept of bridging was introduced in Bloch-Rozmej (1998) but its explanatory potential was more thoroughly explored in Bloch-Rozmej (2008). Also the evidence on consonant harmony addressed in this article comes from the latter source.

(2)

a. *substantial identity* b. *functional identity*



As depicted in (2a), the very occurrence of identical elements in consecutive segments plays a crucial role in the harmony relation. The same primes can enjoy either different or similar status within their segmental expressions but this has no impact on the nature or consequences of the relation. We shall label this type of bond *a substantial identity relation*. The latter, status-based, type of relation in (2b) has three sub-cases. In (2b, i., ii.), the identity of melodic material in its substance must additionally be coupled with the same functional status it enjoys within melodies that contract the relation. This means that for a harmonic bond to become established, a particular language will require that the elements not only be identical, but also both function as either heads or operators. Such relations will be labeled as *head and operator alignment* respectively. The third theoretical option in (2biii.) assumes that primes which are significant for the harmonizing process are heads of their segments. However, it is not their substance that matters but the very headed nature of the melodies in which they reside. Hence, the structure in (2biii.) depicts *a headedness alignment relation* in which the substantial identity of primes is of minor importance. We shall subsume all the cases schematized in (2b) under the category of *functional identity*.

3. Consonant harmony: inter-element relations at a distance

Consonant harmony constitutes a specific manifestation of inter-element bonds. The harmonic change can be analyzed in terms of the requirement imposed on particular melodies within a given domain to agree with respect to some phonological feature. Within a single morphological domain, it takes on the form of a co-occurrence restriction. In other words, sequences of segments that contain a harmonizing property will be attested in lexical forms, to the absence of disharmonic strings. Across domain boundaries, in turn, harmony manifests itself as a dynamic process of assimilation. The most widely discussed types of melodic harmony

involve vowel–vowel and vowel–consonant interactions. However, the available studies of inter-consonantal harmony have been based on limited empirical material (e.g., Shaw 1991, Odden 1994, or Gafos 1999). In this context, the work of Hansson (2001a), an *OT*-based study, is definitely the most extensive in scope, offering the most detailed typological survey of inter-consonantal harmony phenomena. The author presents a wide array of cross-linguistic evidence and formulates generalizations pertaining to consonant harmony. Hansson (2001a) challenges the assumption issued by Gafos (1999), and compliant with his theory of articulatory locality, that the only possible kind of consonant harmony is coronal harmony. Such a premise is claimed to derive from the ability of "the articulatory parameters controlling the shape and orientation of the tongue tip-blade […] to permeate intervening vowels and consonants" without modifying their articulation and acoustics (Hansson 2001a). Hansson brings up apparent counterexamples to Gafos's analysis, outlining evidence on inter-consonantal harmony based on sharing other phonological properties, underlying such processes as stricture, dorsal and labial consonant harmony, secondary articulation harmony, nasal, or liquid and laryngeal harmony. Undoubtedly, the process of melodic sharing that targets two consonants at a distance can also involve elements other than those triggering coronal harmony, for example those specifying the manner of articulation or voicing characteristics of segments.

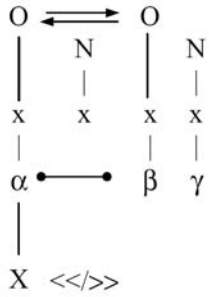
Furthermore, it needs to be observed that the phenomenon of consonant harmony has received various treatments, depending on the framework adopted. Within the model of Generative Phonology, it is consistently assumed that basically the same mechanism motivates both vocalic and consonantal harmony, its nature being determinable primarily on the basis of the vocalic interactions, definitely prevailing in natural languages.

Government Phonology offers a range of conceptual devices for analyzing inter-segmental relations. In brief, we should mention inter-onset and inter-nuclear government, spreading and bridging. In the present article, we intend to focus on the last type, which will be used to express the horizontal relations between consecutive elements at a distance. It will be maintained that bridging, an inter-element bond, turns out to be of utmost importance in the analysis of consonant harmony phenomena. What may seem pretty puzzling about consonant harmony is its selective character. More precisely, the modification targets selected segments across some stretch of representation, even though other realized vowels and consonants intervene between them. What is more, harmony will not affect the intervening melodies in any way (an option depicted in (3b). The harmonizing property modifies a specific expression either to the right or

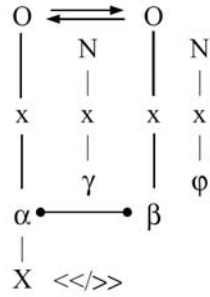
to the left of its segmental host. An alternative to the case just described can be the situation when the onsets whose segments undergo some sort of assimilation are strictly adjacent melodically (as in (3a)). For example, in the case of palatalization spreading in Irish in the form *doirse* [do:rʹʃə] "door, pl.", the segments [rʹ] and [ʃ], which agree in their slender quality, are prosodically separated by an empty nucleus, which makes them neighbors on the melodic level.[7] These two situations can be represented as follows:

(3)

a. *Melodic adjacency*



b. *Melodic separation*



α, β, γ, φ = segments
X = element
<</>> leftward/rightward prime propagation
inter-onset relation
segment assimilation

Let us compare the two structures in terms of the inter-element relations they depict. Importantly, both interaction types are enabled by the existing inter-onset relation. In (3a) the contraction of an inter-onset relation fosters the spreading of a particular prime from the head onto the dependent position. The directionality of the relation is language-specific. In the structure in question, we have chosen to specify the spreading prime under the left-hand onset position. However, the opposite directionality of element spreading is also possible. In such a case, the element undergoing propagation would be associated with the right-hand onset slot. As a result

[7] Notice that in the singular from *doras* [dorəs], the relevant consonants are separated by schwa.

of the spreading operation, the segments α and β become assimilated with respect to the spreading property. For instance, they can be palatalized, velarized or devoiced. However, it has to be borne in mind that no movement or duplication of the spreading element is involved here. The element that spreads extends its domain of interpretation over a larger stretch of representation. It also has to be underlined that the spreading prime cannot skip any melodies and apply selectively. Hence, the nucleus separating the melodies involved is empty. On the other hand, in (3b), the segments agree with respect to a given element X regardless of being separated on the melodic level by an expressed nucleus. Hence, their interaction is more difficult to be accounted for by means of the spreading operation. The assimilation phenomena across intervening segments that are found in natural languages raise a fundamental question about the licensing path through which the assimilation target acquires the properties of the assimilation trigger. This issue will be considered in the subsequent part of the paper. Below, we shall present some evidence documenting the operation of long-distance consonant harmony. Examples come from two languages: Bukusu and Sundanese where the phenomenon of liquid harmony is attested.

4. Liquid harmony: evidence from Bukusu and Sundanese

In the phonological literature, the term *liquid harmony* is employed to cover an extensive range of segmental interactions.[8] These can involve either pairs of liquid segments or liquid plus non-liquid combinations. This kind of harmony operates either dynamically, thus pertaining to changes occurring in morpheme alternations, or it can take on the form of static restrictions on morpheme phonotactics.

As described in de Blois (1975) and Odden (1994), one of the Bantu languages – Bukusu – exhibits the phenomenon of liquid harmony. The process involves the cross-morphemic sequences of [l] and [r] that are required to undergo harmonic assimilation. In detail, the modification targets the suffixal [l] which when preceded by the rhotic liquid, is realized as [r]. The examples given in (4) below illustrate this development.

[8] The discussion in this section is based on Bloch-Rozmej (2008).

(4) Liquid harmony in Bukusu (Hansson 2001a)

a.	bir-ir-a	"pass for"
	ir-ir-a	"die for"
	kar-ir-a	"twist"
b.	but-il-a	"pick"
	i:l-il-a	"send thing"

The data show that the lateral in the applicative suffix /-il/ has to harmonise with the root-final [r]. However, no harmonic change will ever be found when the preceding consonant is other than [r]. This regularity is revealed by the words in (4b). Interestingly, the process operates across an intervening vowel. Thus, as already explained, the development cannot be analyzed in terms of element spreading since the segments involved are not melodically adjacent. What is more, liquid harmony can also be effected at longer distances. As pinpointed in the Comparative Bantu On-Line Dictionary database (CBOLD),[9] this long-distance assimilation seems to be optional. The examples below clearly document this tendency.

(5)

ruk-ir-a	or	ruk-il-a	"plait for"
rum-ir-a	or	rum-il-a	"send for"
re:b-er-a			"ask for"
resj-er-a			"retrieve for"

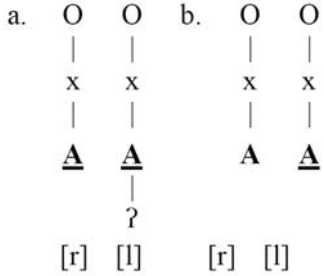
As can be seen, the liquid of the suffix is required to harmonise with the root-initial [r]. Clearly then the assimilation is effected across two vowels and a consonant. In the GP analysis of this modification, one has to resort to melodic structures involving phonological primes. In such representations, both the concrete elements and their status have to be determined. As argued in Harris (1994), both liquids are characterized by the coronal place of articulation which is expressed by means of the element **A**. The property of partial closure typical of the lateral needs to be specified by means of the occlusion element **ʔ**. Notice that the rhotic lacks the occlusion property, hence the absence of the stopness prime in its melodic make-up. The structures of the liquids employing the two primes are given in (6a). Yet, in the more recent GP-based studies proposals have been made to express stopness as the headed status of the place-defining prime (e.g. Bloch-Rozmej 2008).[10] We believe that the occlusion-less

[9] Searchable on-line at http://linguistics.berkeley.edu/CBOLD.

[10] The discussion of this issue would have to be lengthy and detailed. Hence, we abstain from bringing up all the arguments in favour of the elimination of the

representation of the two sounds is capable of showing their close relationship and the susceptibility of the lateral to harmony. Thus, in terms of segmental representation, the difference between the two liquids can be encoded in two basic ways:

(6) Element-based structures of the liquids



As already stated, in (6a) the two structures differ with respect to the presence of the element of occlusion in the composition of [l], and its absence in [r]. The same place-defining prime **A** resides in both structures. In order for the lateral to harmonize with the rhotic, the delinking of the stopness-specifying prime will have to take place. Turning now to the alternative solution depicted in (6b), it has to be observed that the two melodies, [r] and [l], are defined by means of one and the same element **A.** However, the prime enjoys a different status within either expression. In [r], **A** is a dependent, whereas, [l] is an **A**-headed segment. It is clear then that the headedness of the place prime performs an additional function in the structure of the lateral. Namely, it defines the property of occlusion.

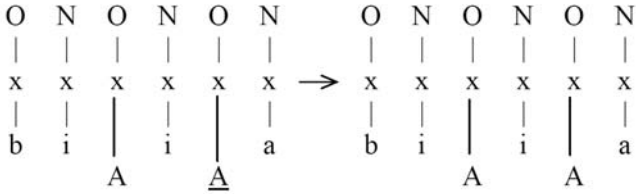
The representation proposed in (6b) seems to have distinct advantages over the one in (6a). In the first place, it is more economical in terms of the number of elements and more general. Further, such an approach assumes a special role of segment's headedness: more specifically, that the status of being headed is interpreted as stopness. This would hardly be an innovation since, as demonstrated in Bloch-Rozmej (2008) for German or in Nilsson and Cyran's (1998) analysis of language change of Ukrainian and Polish, headedness can add additional dimensions to headed non-nuclear expressions. On the strength of that, we will hypothesize that in the system of Bukusu the dimension of headedness is employed to express the property of occlusion (stopness). Importantly, the implementation of

occlusion prime. For a thorough presentation of the arguments, see the source mentioned above as well as Ritter (1997).

element status to define an additional property of segments has to be language-specific. Normally, the headed or dependent status of a prime result in its either more extensive or more limited contribution to the phonetic output. Heads are more prominent and have a larger impact on the interpretation of the melody.

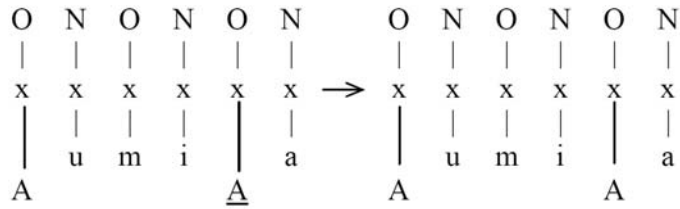
The element-based representation of the word *birira* "pass for", presented in (7) below, has been constructed in accordance with the occlusion-less hypothesis:

(7) The harmonic change in birira "pass for"



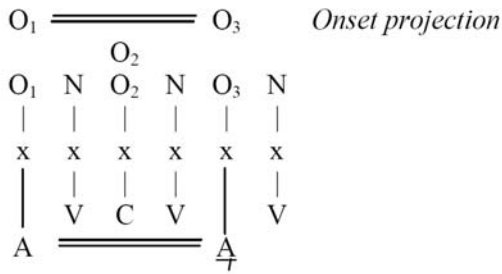
The structure proposed in (7) enables us to account for the harmonic assimilation in a straightforward manner. The addition of the suffix evokes a change which consists in the mere loss of the head-status of the **A** prime in the structure of the lateral. Thus, it can be claimed that consonantal harmony in Bukusu manifests itself as *headlessness agreement*. In other words, the participants of the harmonic modification have to be both headless segments, i.e. without any active prime in the head status. In the word *birira*, the harmonic domain extends rightwards from a headless [r] to include the suffixal consonantal segment. As a result, the lateral changes into a rhotic. Additionally, the language exhibits optional long-distance harmony effects. Such a development can be found in the word *rum-ir-a* "send for", the structure of which is supplied in (8) below:

(8) Long-distance harmony in Bukusu



In *rumira*, the harmonic bond is established between the word/domain-initial coronal rhotic and the suffix-initial lateral. In consequence, the lateral assimilates to the [r] in terms of its status, thus becoming de-headed. The Bukusu harmony of liquids manifests itself as the assimilation process operating rightwards from the coronal [r]. The distance at which it is capable of targeting the lateral depends on the position of the coronal. In any case, harmony can reach the target segment across other melodies. The process is characterized by the rightward directionality. Importantly, the harmonic assimilation involves non-nuclear expressions only. Since the consonantal segments are not adjacent on the melodic level, the harmonic domain must be created at the relevant projection level. Interestingly, the domain "skips" all the intervening onset heads and consists of exactly two onset positions. The onsets in question license the coronal elements each. As a result, an **A**-bridge can become established. The creation of the element bridge seems to depend on the substantial identity of the primes on the one hand and the headless nature of the trigger on the other. The effect of the harmonic operation is the de-heading of the target melody. Put differently, within an **A**-bridge, headlessness requirement is imposed. In the present article, this effect is labeled *headlessness alignment*. See the structure in (9) depicting this phenomenon.

(9) Headlessness alignment within an **A**-bridge



We shall propose that the establishment of the element bridge in Bukusu can be effected only between melodically simplex expressions (mono-elemental) that are identical in terms of the melodic make-up (substantial identity), yet differing with respect to the status of the primes. Harmony emerges as a kind of status-leveling, i.e. the loss of headedness. Thus, we are dealing with the functional identity requirement within bridging domains.

What appears most puzzling about the liquid harmony in Bukusu is the fact that only weak segments can trigger harmony. Stronger consonants, i.e. ones structured as compositional headed expressions, refuse to initiate this kind of assimilation. Consider, for example, the word *but-il-a* "pick", where the root-final coronal plosive, even though defined by a headed **A**, does not trigger any change of [l] into [r]. If we stick to the headedness-based representation of the liquids [l] and [r], then the answer to this problem could lie in the headed status of the lateral. One might possibly argue that in this cross-morphemic context, transvocalic consonant sequences have to agree in terms of their status which can be either headed or headless. Admittedly, [t] and [l] are headed structures, while [r] and the harmonized [l] (realized as [r]) are headless. However, we need to evoke such forms as *ruk-il-a* "plait for", where [k] and [l] differ in terms of headship, with [k] being headless and [l] headed.[11] Thus, even though, the velar plosive is weak as a headless expression, it seems to be still "too strong" to trigger harmony. In conclusion then, the analysis of the harmony process has to recognize two important conditions whose fulfillment is necessary for assimilation to come into effect. Firstly, the trigger has to be mono-elemental, and secondly, it has to be headless. Only then will the harmonic change result in the headlessness alignment effect.

The status-based account of the [r]/[l] alternation proves efficient in the case of the delateralization process found in Bukusu. Interestingly, the opposite development takes place in Sundanese (a Malayo-Polynesian language). Namely, it is the rhotic segment that has to be strengthened in certain contexts and turns into [l]. In other words, Sundanese liquids have to agree with respect to the feature [+lateral] (Holton 1995, Suzuki 1998, 1999). The lateral harmony effects accompany the process of infixation of the plural /-ar/ after the root-initial consonant. The data illustrating this development are supplied in (10) below:

(10) Sundanese lateral harmony[12]

	Singular	*Plural*	
a.	kusut	k+ar+usut	"messy"
	poho	p+ar+oho	"forget"
	di-visualisasi-kɨn	di-v+ar+isualisasi-kɨn	"visualised"
b.	rɨwat	r+ar+ɨwat	"startled"
	rahɨt	r+ar+ahɨt	"wounded"

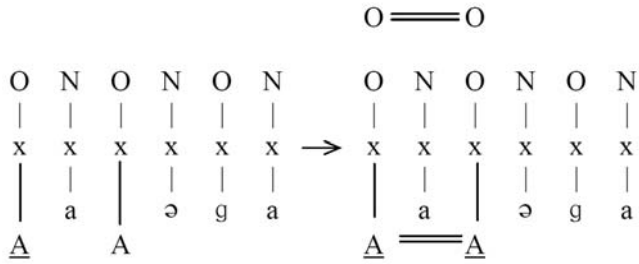
[11] In the Element Theory, which is part of the Government Phonology framework, velarity is represented as the absence of any active resonance element in the head position of the segment. Thus, velars are headless.

[12] Cohn's (1992) examples have been cited.

c.	lɨtik	l+al+ɨtik	“little”
	ləga	l+al+əga	“wide”

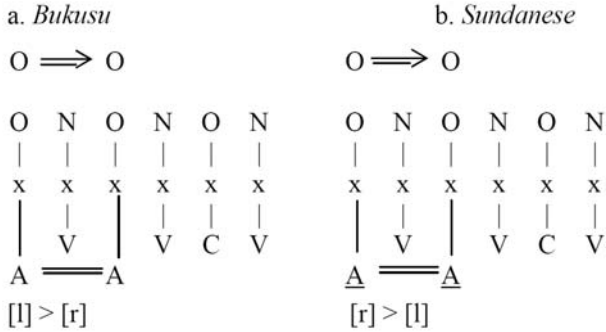
A closer look at the above examples allows us to observe that the infix remains intact to any modification when placed after any consonant save the lateral [l]. When inserted after the lateral, [r] is forced to assimilate to its left-hand neighbor. Let us illustrate this harmonic change with the form *l+al+əga* “wide, pl.”

(11) The lateral harmony in Sundanese



Even at a first glance, the situation in Sundanese seems to resemble that in Bukusu. More precisely, the coronal elements appear to play the key role in the harmonic process. The structure in (11) reveals that, similar to Bukusu, the harmonic domain is constituted by the bridge of **A** primes, one belonging to the trigger, the other to the target. However, in this case, the trigger is a headed segment. Hence, unlike in Bukusu, the harmony in Sundanese manifests itself as the extension of headedness, not headlessness. In other words, both domain members need to award their primes with head status. The process of headedness-sharing, or headedness alignment, is directional and proceeds from left-to-right. Again, just like in Bukusu, it is the left-hand segment that determines the head-status of the bridge. However, the difference between these two systems consists in the fact that the agreement in headlessness yields a pair of coronal [r]’s (Bukusu), whereas headedness alignment results in a sequence of two laterals (Sundanese). In Sundanese, the headed nature of the coronal prime adds an extra property to the relevant segment, namely that of occlusion. Below we depict the two different effects of the **A**-bridge in Bukusu and Sundanese, with the arrow indicating the directionality of the harmony process:

(12) Status-dependent harmony effects

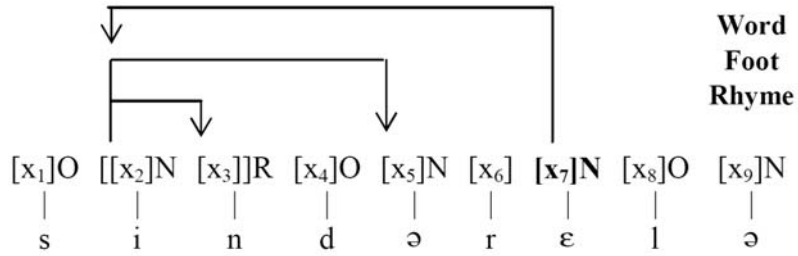


The structures depict that the left-hand segment imposes the change of status on its bridge complement, effecting either its de-heading as in (12a) or headedness–alignment in (12b).

In sum, the systems of Bukusu and Sundanese reveal that elements belonging to consecutive segments are capable of forming inter-element bridges. These bridges serve as a kind of "nest" for the operation of the headship-related harmony between melodically similar segments. The **A**-bridge can be established between representationally distant segments across melodically-filled positions. Hence, as already stated, the relation has to be created at a higher level of projection, onset projection for instance. However, it has to borne in mind that any inter-onset relation depends crucially on the licensing that comes from nuclei. This state of affairs follows directly from the universal Onset Licensing Principle (Kaye *et al.* 1990), which requires that each onset must be universally licensed by the following nucleus. Hence, it is to be expected that any relation between onsets has to be effected by nuclear licensing. To see how this is possible, let us clarify how licensing potential is distributed within a phonological domain.

With reference to phonological licensing, Harris (1994: 155) pinpoints the fact that its distribution proceeds from the nuclear head of the domain to other nuclei which, in turn, license the non-nuclear positions. The example depicting the operation of licensing could be the English word *Cinderella*:

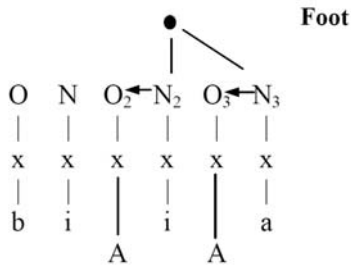
(13)



The head of the domain is the stressed nucleus N_7 (in bold) is the source of all the licensing potential for the positions within the word. The head licenses N_2 at the word level, the latter nucleus being the head of the first foot. N_2 is the licenser of the nuclear constituent N_5. The nuclei, in turn, distribute their licensing potential to the preceding onsets in accordance with the Onset Licensing Principle. Rhymal complements, on the other hand, (e.g. x_3) will acquire their potential from the onset governors.

Let us now return to the harmony analysis and depict a foot-based representation of the exemplary Bukusu item *birira* "pass for":

(14)



(14) shows that the head of the right-hand foot N_2 is the licenser for the foot complement N_3. The nuclei are licensers for the onsets O_2 and O_3 respectively. Recall that onsets and the following nuclei constitute licensing domains. Within such domains, it is the nucleus that determines the number and type of elements licensed by its onset licensee's position. At the foot level, the relevant nuclei are involved in a licensing relationship, whereby the head nucleus imposes the headlessness harmony requirement on the onsets licensed by nuclei constituting the foot. In

Bukusu it is O_3 that has to harmonize with O_2, since the latter belongs to the domain whose nuclear head is the head of the foot. Thus, any form of harmony involving non-nuclear segments will ultimately be authorized by nuclear licensers, be it headedness or headlessness alignment.

5. Conclusion

We have seen that the mechanisms of inter-element bridging and status alignment prove to be very helpful in the account of the consonant harmony phenomena. The former operation requires the presence of inter-onset licensing, whereas the latter hinges on the intra-segmental organization of elements. Identical elements licensed by onset positions can form inter-element bridges where the harmony process operates. In Bukusu and Sundanese, it is the coronal element **A** that can form a bridge. Within a bridging domain, the status of the coronal prime can turn out to be either a friend or foe, leading to either headedness alignment or headedness loss. The former operation can be attested in Sundanese, where lateral harmony is observed. The latter, on the other hand, occurs in Bukusu, where we find headlessness alignment effects manifested phonetically as delateralization.

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