#### 4.3.3.1.1 Nominal Group Integration

To the extent that nominal groups realise participants at clause rank, h-provection within the nominal group concatenates elements within this class of functions. The following sections illustrate how h-provection integrates nominal groups by concatenating Deictic with Entity, Numerative with Entity and Deictic with Numerative.

#### 4.3.3.1.1.1 Deictic^Entity Concatenation

Within the nominal group, h-provection is induced by some DEICTICS, including the interrogative<sup>1</sup> cá, as demonstrated by cá háit {kA: hA: $\dagger$ ,} 'where' (literally: 'what place'), in which the effect of the h-provection is to bind Deictic to Entity within the nominal group:



The determinative DEICTICS that induce h-provection within the nominal group include the [feminine, singular, genitive] and [common, plural] forms of the article: na  $\{fI'\}$ . This Deictic^Entity concatenation can be illustrated by na haenna  $\{fI'he:fI'\}$  'the livers'.



<sup>&</sup>lt;sup>1</sup> Another interrogative cé  $\{k,e:\}$  affects a following [third] personal pronoun only, yielding cé hé [masculine, singular], cé hí [feminine singular] and cé hiad [plural]. In each case, the form of the personal pronoun is also consistent with having undergone lenition. The [negative] form of the [nonpast] copula — ní — has the same effect on just these pronouns.

Another DEICTIC that induces h-provection within the nominal group is the [third, feminine, singular] possessive determinative a  $\{ \}^{1}$ . This Deictic^Entity concatenation can be illustrated by a haois  $\{ hi:S \}$  her age'.



When dhá intervenes between this Deictic and a following noun functioning as Entity within the nominal group, h-provection is delayed until the noun (just as eclipsis is delayed when dhá intervenes between the eclipsing [third, plural] possessive and a following noun). This is illustrated below by a dhá hiníon { VA: hin,i:n} 'her two daughters', where h-provection binds Numerative and Entity within the nominal group:



4.3.3.1.1.2 Numerative^Entity Concatenation

The Numeratives that induce h-provection within the nominal group are the ordinatives other than chéad 'first'.<sup>2</sup> This is illustrated below by an dara háit { '[n]  $\partial A$ \' hA:†,} '(the) second place', where h-provection binds Numerative and Entity within the nominal group:

<sup>&</sup>lt;sup>1</sup> A reconstructed earlier form of this h-provector was S-final \*esija:s (Pedersen and Lewis 1961: 216).

<sup>&</sup>lt;sup>2</sup> The quantifying Numeratives trí ceithre cúig sé (3-6) prefix /h/ to uaire 'times' (CB: 24).

# 4.3.3.1.1.3 Deictic^Numerative Concatenation

The definite article functioning as Deictic induces h-provection within the nominal group when a Numerative intervenes before the following noun functioning as Entity. This is illustrated by beir leat na hocht gcinn { 'VA: hin, i:n} 'bring (with-2sg) the eight of them', where h-provection binds Deictic and Numerative within the nominal group (functioning as Medium):

## 4.3.3.1.2 Prepositional Phrase Integration

To the extent that prepositional phrases realise circumstances at clause rank, h-provection within the prepositional phrase concatenates elements within the syntagmatic extension of this class of functions. The integration of prepositional phrase structure by means of h-provection involves the concatenation of Process and Range.

Within the prepositional phrase, the prepositions go 'to' and le 'with' induce h-provection. For example, in go hÉirinn  $\{g' he: \, eff,\}$  'to Ireland', h-provection concatenates the preposition go functioning as (minor) Process with the noun Éirinn functioning as Range, signalling that the two words are functioning within the same lexicogrammatical unit.<sup>1</sup> This is illustrated below.

<sup>&</sup>lt;sup>1</sup> In tá tú go hálainn 'you are beautiful' (literally: 'are 2sg "to" beautiful'; cf English 'to the good'), hprovection concatenates the preposition go functioning as (minor) Process with the adjective álainn functioning as Range, signalling that the two words are functioning within the same lexicogrammatical unit: a prepositional phrase functioning as circumstantial Attribute at clause rank. This is represented below.



## 4.3.3.1.3 Verbal Group Integration

To the extent that verbal groups realise processes at clause rank, h-provection within the verbal group concatenates elements within the syntagmatic extension of this function. Within the verbal group, h-provection is only induced by the [negative] POLARITY — ná  $\{flA:\}$  — that precedes verbs of [imperative] MOOD. This is illustrated below for ná himigh  $\{flA: him, i:\}$  'don't leave' where h-provection concatenates the [negative] POLARITY ná with the verb imigh functioning as Event, signalling that the two words are functioning within the same lexicogrammatical unit:





The Modern Irish definite article an, functioning as Deictic in nominal groups, prefixes /t/ to some vowel-initial and /s/-initial<sup>1</sup> words, provided that the article is not preceded by — or fused with — a preposition. The history of this process would seem to be that the t-provection article has evolved from Proto-Celtic \*sindos~sindas which became \*ind-h through lenition, and then int before vowels and *lenited* /s/ — {h} — in some case forms of Old Irish (Thurneysen 1980: 132).<sup>2</sup>

This following discussion briefly illustrates how t-provection functions to integrate nominal groups by concatenating elements within their function structure, namely: Deictic with Entity, and Deictic with Numerative. To the extent that nominal groups realise participants at clause rank, t-provection within the nominal group concatenates these elements within this class of functions.

#### 4.3.3.2.1 Deictic<sup>^</sup>Entity Concatenation

The article functioning as Deictic prefixes  $/\dagger/$  to an immediately following vowel-initial [masculine] noun, or an /s/-initial [feminine, singular, common] or [masculine, singular, genitive] noun functioning as Entity in a nominal group. This process can be illustrated by an t-ainm {'[n]  $\dagger$ an,<sup>ë</sup>m,} 'the name', where / $\dagger$ / is prefixed to the [masculine] noun ainm, and by an tsúil {'[n]  $\dagger$ u:l,} 'the eye', where / $\dagger$ / is prefixed to the [feminine, singular, common] noun súil. In each case, the function of the t-provection is to bind together the Deictic and Entity within the nominal group. These examples are represented below.



This process can be further illustrated by ceol an tsrutháin  $\{k, 0:1 \ [n] \ |\phi|a:n,\}$  'music of the stream' (literally: 'music the stream-[genitive]'), where /|/| is prefixed to the [masculine, singular, genitive] noun srutháin. In this case, the function of the t-provection is to bind together the Deictic and Entity within the embedded nominal group functioning as Qualifier of the ranking nominal group. This example is represented below.

<sup>&</sup>lt;sup>1</sup> This only affects Onset (Head) /s/ — (proclitic) Outset /s/ is not affected.

<sup>&</sup>lt;sup>2</sup> See Thurneysen (1980: 293-299) for the details.



### 4.3.3.2.2 Deictic^Numerative Concatenation

The article functioning as Deictic also prefixes  $/\dagger/$  to an immediately following vowelinitial Numerative. This can be illustrated by an t-ocht gcat { [n]  $\dagger ox\dagger$  ga $\dagger$ } 'the eight cats', the function of the t-provection is to bind together the Deictic and Numerative within the nominal group:



# 4.4 Summary

This chapter has used the model of phonogenesis developed in previous chapters to describe the cohesive resources that contribute to the creation of articulatory texture in Irish. The discussion can be summarised as follows.

The discussion of articulatory potential constrained to — and indicative of — specific lexicogrammatical domains was concerned with three interplanal interactions: articulation with the morpheme, articulation with the word, and articulation with the group/phrase.

The first interplanal interaction discussed, the articulatory tracking of morphemes, was said to be effected by demarcation: specifically by two peripheral phases, the Outset and the Coda, that envelop the core syllable structure previously described. The Outset was said to be restricted to the palatatalised and labiovelarised exponents of /s/, while the system of Coda potential was devised to generate all consonants except those of the Offset. The sole complex Coda was identified as the labiovelarised exponent of /x†/, and found to occur only after simple Rhymes.

Constraints on Outset^Onset concatenation were identified and violations of these constraints were said to suggest the location of a morpheme boundary *after* the /s/. Constraints on Offset^Coda concatenation were found to vary with the PHONATION of the Offset. Constraints on syllable concatenation (Offset^Onset) that hold within morphemes were also identified, and the violation of these constraints was said to demarcate morpheme boundaries probabilistically.

The notion of expression plane incongruence was introduced to describe differences between phonological structures and their instantiation regarding the phoricity by consonants at syllable boundaries. The types of incongruent instantiation explored involved the retiming of Coda and Offset consonants as Onsets, resulting in the loss of morpheme demarcation.

The second interplanal interaction discussed, the articulatory tracking of words, was said to be effected by fields of palatalised and labiovelarised consonant POSTURE, which concatenate syllables within the domain of the word. The phonetic effects of POSTURE fields on the articulation of consonants, and on the transitions from consonants to vowels and from vowels to consonants were described, and the effects on the articulation of vowels were modelled in terms of context-specific topological deformations of the vowelscape. The potential for POSTURE fields to demarcate word boundaries was also outlined, along with the circumstances in which this function is lost.

The third interplanal interaction discussed, the articulatory tracking of groups and phrases, was said to be effected by the initial consonant mutation processes of eclipsis, lenition, h-provection, and t-provection, all of which were modelled syntagmatically as concatenating mutagenic<sup>1</sup> fields. In concatenating the elements of groups and phrases, mutation integrates the clause rank elements they constitute. Paradigmatically, eclipsis and lenition were modelled as contextual deformations of Onset states, the complexity and grammaticalisation of which were interpreted as evolved and, drawing mainly on Thurneysen (1980), demonstrated to have arisen from simple natural phonological processes.<sup>2</sup>

This thesis has, so far, been concerned with introducing, outlining and demonstrating a Systemic model of phonology-as-dynamic process, a model that has been organised according to evolving functional correlations between content and expression. In the next chapter, this model of phonogenesis will be positioned within the biological perspective of Universal Darwinism.

<sup>&</sup>lt;sup>1</sup> Mutagenic fields were associated with virtual segments as traces of historical Rhyme structures.

 $<sup>^2</sup>$  This model of articulatory texture is further illustrated by the description of Australian English that appears in the Appendix. There it can be seen that unlike Irish, which exploits a range of demarcative and concatenative cohesive articulatory strategies, (Australian) English relies very heavily on demarcation.