Marking the unmarked:
The geometry of exceptional syncretisms

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Abstract: In models of morphosyntactic feature geometry, unmarked features are often necessarily underspecified because they are absent from the geometry and, hence, unavailable for specification. At the same time, underspecification is held to be the primary source of morphological syncretism. Together, these two approaches predict that, given the opportunity, a morphological form associated with unmarked features should participate in syncretism over and against any other form in a paradigm. While this is generally true, there are exceptional cases in which the form associated with unmarked features is precisely the one that fails to participate in syncretism. I illustrate instances of this kind and argue that they provide evidence for the availability of unmarked features within the universal geometry. If such features are available, then languages must have the option of uniquely specifying them (i.e., of ‘marking the unmarked’). When this is recognized, a simple solution to these exceptional patterns is available — one that relies only on underspecification, and not on accidental homophony or rules of impoverishment.

Keywords: morphosyntax; distributed morphology; features; syncretism; underspecification.

1. Introduction

Until recently, morphosyntactic features were believed to function as independent primitives that combine freely with each other in unstructured feature bundles. Following developments in phonological theory, recent work in the morphology-syntax interface has abandoned this assumption and explored the idea that morphosyntactic feature bundles have an internal hierarchical structure — a feature geometry (e.g., Harley 1994,
MARKING THE UNMARKED

Harley & Ritter 2002, Cowper 2004, 2005a, 2005b). Such feature-geometric approaches have the potential to account for both cross-linguistic and language-internal constraints on the realization and interpretation of morphosyntactic features.

In these models of morphosyntactic feature geometry, unmarked features are often necessarily underspecified. This is because they are absent from the geometry and, hence, unavailable for specification. Under such circumstances they emerge only as default interpretations of bare nodes in the geometry. At the same time, underspecification is held to be the primary source of morphological syncretism. Together, these two approaches predict that, given the opportunity, a morphological form associated with unmarked features should participate in syncretism over and against any other form in a paradigm. While this is generally true, there are important exceptions. In some languages we find cases where syncretism occurs within a paradigm, but counter-to-expectation, the morphological form associated with unmarked features is precisely the one that does not participate in the syncretism. These exceptional patterns of syncretism present a challenge for the previously proposed models of feature geometry, which cannot account for them in terms of underspecification and must attribute them to accidental homophony. In this paper, I illustrate instances of these exceptional patterns and argue that they provide evidence for a different kind of feature geometry. More specifically, I suggest that unmarked features must be available within the universal geometry and that languages must have the option of uniquely specifying them (i.e., of ‘marking the unmarked’). Taking this approach, I present a simple solution to these exceptional patterns. The proposed analysis is based entirely on underspecification, and does not rely on homophony or rules of impoverishment.

The paper is organized as follows. In section 2 I sketch the theoretical background assumed throughout the rest of the paper and suggest that an account of syncretism based solely on underspecification is preferable to one that relies on rules of impoverishment. In
section 3 I introduce the feature geometry proposed by Harley & Ritter (2002). This geometry is extended to English present tense verbs in section 4, where I demonstrate that it makes undesirable predictions. In section 5 I consider an alternative geometry proposed by Cowper (2005) and point out that it too is unable to account for the pattern of syncretism in English. In section 6 I suggest that these geometries be revised to include morphosyntactically unmarked features and argue that this move is motivated not only by the data, but also on independent theoretical grounds. Borrowing insights from Avery and Idsardi (2001), I propose an alternative model of morphosyntactic feature geometry in section 7 — one that accounts for the exceptional pattern of syncretism in English verbs entirely in terms of underspecification, without the need to posit homophones. In section 8 I demonstrate that the proposed analysis can be extended to account for other patterns of exceptional syncretism, including syncretism of non-adjacent features and diagonal syncretism. Finally, in section 9 I consider an alternative account of diagonal syncretism (Béjar & Hall 1999) and argue that it is insufficient to account for the data and does not obviate the need for the proposed analysis.

2. Syncretism in Distributed Morphology

Much of the work on morphosyntactic feature geometry is situated within the theoretical framework of Distributed Morphology (Halle & Marantz 1993, Halle 1997, Embick & Noyer 2001), which itself assumes the familiar T-model of grammar in (1). In this approach, the syntactic component manipulates abstract morphemes ($X^0$s) that consist of structured feature bundles. These abstract morphemes lack phonological content and must be distinguished from Vocabulary items (VIs). Unlike $X^0$s, VIs have
phonological content and are inserted after syntactic computation in order to provide a phonological spell-out of $X^0$'s at PF.

There are two ways in which morphological syncretisms have been accounted for within this model: underspecification and impoverishment. First, VIs may be underspecified for morphosyntactic features. Vocabulary insertion operates according to the Elsewhere Condition. The VI bearing the greatest subset of the features that make up an $X^0$ (i.e., the most specific VI) will be inserted to spell out that $X^0$. If a VI is underspecified, its feature structure will be more generic and may qualify as a subset of the feature structure of more than one $X^0$. Thus, syncretism emerges when a single, underspecified VI spells out multiple $X^0$'s.

Second, morphological syncretisms are sometimes accounted for by means of impoverishment. Some theorists recognize a level of Morphological Structure (MS) that intervenes between the syntactic output and vocabulary insertion at PF (e.g., Noyer 1992; Halle & Marantz 1993, Harley 1994), as illustrated in (2). At this intermediate level, various morphological operations may alter the feature structures of $X^0$'s prior to vocabulary insertion. One such operation is impoverishment which deletes (or de-links) features from $X^0$'s. Impoverishment rules operate like filters on $X^0$'s to produce intermediate $M^0$'s with reduced feature specifications (e.g., $[\text{FEM}] \rightarrow \emptyset / [\text{1P}]$). Vocabulary insertion then applies to spell out the impoverished $M^0$'s.
After impoverishment, the features of a highly specific VI may no longer constitute a subset of the features on the $M^0$. Rather, the VI may now be over-specified in relation to the reduced $M^0$. When this occurs, a more generic, underspecified VI may be inserted — one that would not have been inserted otherwise. Thus, impoverishment can extend the range of application for certain VIs, allowing them to spell out multiple $X^0$s (or $M^0$s in this case), thereby producing instances of syncretism.

There are several undesirable traits in a model that relies on impoverishment to account for syncretism. First of all, impoverishment requires an additional level of representation (MS) which is not required for underspecification. Secondly, even when it is constrained by feature geometry (Harley 1994) or supplemented by redundancy rules (Noyer 1998) impoverishment remains a very powerful mechanism that is prone to overgenerating possible grammars. By comparison, an account of syncretism based solely on underspecification would be characterized by greater formal economy and restrictiveness. For these reasons, I assume that such an account is preferable to one that relies on rules of impoverishment.\(^1\) Moreover, as I will show in section 5, impoverishment cannot solve the problem presented by feature geometries in which morphosyntactically unmarked features are necessarily underspecified.

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\(^1\) A full critique of impoverishment is beyond the scope of this paper. See Carstairs-McCarthy (1998) for a critical discussion.
3. Harley & Ritter’s (2002) feature geometry

Harley and Ritter (2002) (henceforth H&R) propose the feature geometry in (3) to account for person, number, and gender features in pronouns. In this geometry, PARTICIPANT (PART) represents person, INDIVIDUATION (INDV) represents number and CLASS represents gender. Default features are underlined.

(3) Harley & Ritter’s (2002) feature geometry (simplified)

Referring Expression (= Pronoun)

PARTICIPANT

Speaker Addresser Minimal Group

INDIVIDUATION

CLASS

Masculine Feminine

Feature geometries such as this are intended to encode markedness and dependency relationships between features. Morphosyntactically marked features are generally taken to be those that are less common cross-linguistically. Their presence in a system tends to imply the presence of other (unmarked or less marked) features, and they tend to be overtly represented (i.e., ‘marked’) by some piece of morphology (e.g., an affix.

2 H&R (2002) depict the internal structure of the CLASS node as in (i). For the sake of the current discussion I assume the simplified geometry in (3), as do H&R throughout most of their paper. Nothing critical hinges on this simplification.

(i) CLASS

Animate Inanimate/Neuter

Feminine Masculine
MARKING THE UNMARKED

or suppled vocabulary item). Unmarked features are more basic and widespread, less dependent on other features, and often signaled by the absence of overt morphology. For example, most languages which distinguish singular and plural nouns do so by means of a plural affix. In such cases the bare unaffixed noun stem represents the singular (e.g., English *cat* (SG) vs. *cat-s* (PL)). Thus, plural number is considered more marked than singular.

In feature geometries like that of H&R, the distinction between morphosyntactically marked and unmarked features is represented formally in terms of the presence vs. absence of geometric structure. Generally, the more marked a feature is, the more nodes it will employ. Since unmarked features are characterized by the absence of some structure, they are always underspecified in relation to marked features. Thus, unmarked features tend to serve as default interpretations of underspecified structures. For example, H&R represent a singular-plural contrast by means of the feature structures in (4), where [Minimal] (i.e., singular) serves as the default interpretation of the bare INDV (i.e., number) node.

(4)  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. INDV</td>
<td>b. INDV</td>
</tr>
<tr>
<td></td>
<td>Group</td>
</tr>
<tr>
<td></td>
<td>(singular)</td>
</tr>
<tr>
<td></td>
<td>(plural)</td>
</tr>
</tbody>
</table>

$X^0$s and VIs must represent sub-trees of the geometry. While VIs may be underspecified for morphosyntactic features, it is sometimes said that $X^0$s, by comparison, are fully specified (e.g., Harley 1994). However, this point needs to be clarified because there is an important sense in which $X^0$s are also underspecified. Feature geometries are assumed to be part of Universal Grammar. As such, the full geometry is available in principle to every language. However, no language makes use of
every possible morphosyntactic feature. It is generally assumed that the X^0s of a language only make use of as much of the feature geometry as is necessary in order to establish the contrasts of that language. This means that many terminal features are left unspecified in X^0s.

For example, if a language maintains a contrast between singular and plural number, then it need only specify one of the terminal number features, say [Group] (for plural) as in (4b). Within a system that has (4b), the underspecified INDV node in (4a) receives a default interpretation as [Minimal] (for singular). Strictly speaking, (4a) is an underspecified X^0 because it does not explicitly specify the feature [Minimal]. However, within a language that maintains a singular-plural contrast it counts as a fully specified X^0 in the sense that it represents the maximum amount of structure available in that language to specify singular number. Thus, while VIs may be underspecified in relation to X^0s (thus producing syncretism), X^0s may be underspecified in relation to the universal feature geometry. An X^0 which is underspecified in this way must receive a default interpretation since it lacks a specific terminal feature. The default interpretation of an underspecified X^0 is the unmarked or least marked option available.

In many cases, morphosyntactically unmarked features are necessarily underspecified. This is because they are completely absent from the geometry and, hence, not available for specification. For example, in H&R’s model a three-way contrast for person is represented as in (5). 3P is widely recognized as the least marked person feature. As a result, there is no feature representing 3P in H&R’s geometry. Rather, 3P is taken as the default interpretation of an underspecified root node, as illustrated in (5a).

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3 This is similar in spirit to the idea of contrastive feature specification in phonology (e.g., Dresher 2003a, 2003b).
If morphosyntactically unmarked features are necessarily underspecified, and if syncretism is the product of underspecification, then the theory entails a strong link between unmarked features and syncretism. More specifically, the theory predicts that, given the opportunity, a morphological form associated with unmarked features should participate in syncretism over and against any other form in a paradigm. In other words, a singular form might be expected to participate in syncretism by spelling out both singular and plural $X^0$s, but a plural form should not be syncretic with singular; it should only spell out plural $X^0$s. In the vast majority of languages this prediction is borne out. For example, some English nouns such as *sheep* have the overt form of a singular noun (i.e., they lack the plural suffix /-s/). Nevertheless they can function as either singular or plural (e.g., *one sheep, two sheep*). However, English nouns with plural morphology cannot function as singular (e.g., *one cat-s, two cat-s*).

In some languages, however, we find examples of syncretism that run counter to this prediction. In such cases, syncretism occurs within a paradigm, but the morphological form associated with unmarked features is precisely the one that fails to participate in the syncretism. Although rare, these examples do provide a significant challenge to the theory of feature geometry sketched above. In the following section I illustrate instances of this exceptional syncretism in English and Orokaiva.
4. English present tense verbs

H&R’s geometry is designed with pronominal systems in mind. However, it is reasonable to assume that person, number, and gender features should be constrained by a single geometry wherever they occur — whether on pronouns, nouns, verbs, adjectives, etc. For example, where the same set of features are involved, we would not expect them to be governed by one geometry when they occur on pronouns and by a different geometry when they occur on verbs, any more than we would expect a set of phonological features to be governed by one geometry on sonorants and by a different geometry on obstruents. Thus, if the geometry in (3) is valid it is reasonable to expect that it should account for person, number, and gender features in non-pronominal paradigms. In this section, I extend H&R’s model to English present tense verbs and show that it makes undesirable predictions.

English present tense verbs represent one of the strongest and clearest counterexamples to the expectation that syncretism should make use of morphological forms that are associated with morphosyntactically unmarked features. Consider the paradigm in (6).

(6) English present tense verbs

<table>
<thead>
<tr>
<th></th>
<th>3P</th>
<th>2P</th>
<th>1P</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>walk-s</td>
<td>walk</td>
<td>walk</td>
</tr>
<tr>
<td>PL</td>
<td>walk</td>
<td>walk</td>
<td>walk</td>
</tr>
</tbody>
</table>

English maintains a system of subject-verb agreement in which only two present tense verb forms are distinguished: one for 3P SG, and one for all other person-number combinations. By all accounts 3P is the least marked person feature, and SG is the least marked number. Yet it is precisely the combination of these two features, and only these
two features, which is morphologically marked and which fails to participate in syncretism.

The simplest way to account for the English data is to assume that the unaffixed form *walk* is underspecified for person and number (i.e., it represents a generic default form) while *walk-s* is uniquely specified as 3P SG. Notice, however, that there is no structural distinction between an underspecified form and a 3P SG form within the model we are exploring. This is because 3P and SG are morphosyntactically unmarked features and, as such, are always underspecified.

(7) Structural identity between underspecified and morphosyntactically unmarked forms.

\[
\begin{array}{cc}
\text{walk} & \text{walk-s} \\
R & R \\
\text{INDV} & \text{INDV} \\
\end{array}
\]

(underspecified) (3rd person, singular)

The structural identity of these two forms leads to the prediction that they should be syncretic, not distinct. There are two possible solutions to this problem. Either (a) there is no syncretism involved but only accidental homophony, or (b) there is syncretism involved but, contrary to expectation, the /s/ forms are distinctively specified for the unmarked features 3P and SG.

An account of the English verb forms based on homophony is clearly undesirable. Such an account would require multiple homophones, all of them phonologically null despite the fact that they are spelling out morphosyntactically marked features (e.g., /-Ø [PL], /-Ø [PART]). At the same time, the underspecified form with default features would be the only one with overt affixation. Such an account is counter-intuitive and more
complex than one based on syncretism in which the /-s/ form spells out 3P SG and the morphologically simple, affixless form is underspecified.

An account based on syncretism and underspecification requires morphasotactically unmarked features such as 3P and SG to be available for specification within the universal feature geometry. In H&R’s geometry both marked and unmarked number features are available: Minimal (singular) and Group (plural). We might wonder, therefore, what is to prevent a language from contrastively specifying a feature such as Minimal? Strictly speaking, this is a possibility. However, the distinctive specification of an unmarked/default feature carries with it certain implications in H&R’s model. If each feature, marked and unmarked, can be specified independently, then they can also be specified jointly, and this joint specification yields a unique interpretation. For H&R, the combined specification of Minimal and Group yields a dual interpretation (i.e., a minimal group) as illustrated in (8b).

(8) Systems of number contrast according to Harley & Ritter (2002)

a. 2-way contrast

\[
\begin{array}{c|c}
\text{INDV} & \text{INDV} \\
\text{Group} & \text{Min} \\
\text{(singular)} & \text{(plural)}
\end{array}
\]

b. 3-way contrast

\[
\begin{array}{c|c|c}
\text{INDV} & \text{INDV} & \text{INDV} \\
\text{Group} & \text{Min} & \text{Group} \\
\text{(singular)} & \text{(plural)} & \text{(dual)}
\end{array}
\]

Thus, H&R’s feature geometry allows for the distinctive specification of singular number. However, it predicts that any language that does so will also have dual number. This is not the case in English. Moreover, the possibility of specifying unmarked features does not extend to the domain of person. For H&R 3P is not merely the unmarked person feature but the very absence of person features. Hence, it is not represented in the geometry at all. This predicts that it should never be uniquely specified as it appears to be in English.
Although it is rare, the pattern of syncretism displayed in English present tense verbs is not unique to English. A similar pattern is found in the far past indicative paradigm of Orokaiva, a language of Papua New Guinea. Consider the data in (9). Here we see that 3P SG is uniquely marked by the suffix /-n/, and 2P PL by /-w/ (/-a/ marks indicative mood). All other person-number combinations lack overt affixation and are syncretic. While the specification of 2P PL presents no problem for H&R’s geometry, the unique specification of 3P SG does for the same reasons discussed above: 3P is not available for specification in the geometry and the specification of Minimal (for SG) implies the presence of dual number; a prediction that is not borne out in Orokaiva or English.

(9) Orokaiva far past indicative of *hembu* ‘walk’

<table>
<thead>
<tr>
<th></th>
<th>3P</th>
<th>2P</th>
<th>1P</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td><em>hembu-n-a</em></td>
<td><em>hembu-a</em></td>
<td><em>hembu-a</em></td>
</tr>
<tr>
<td>PL</td>
<td><em>hembu-a</em></td>
<td><em>hembu-w-a</em></td>
<td><em>hembu-a</em></td>
</tr>
</tbody>
</table>

In summary, the English and Orokaiva data are characteristic of true syncretism, and not of homophony, in that the morphologically simple forms (Eng. *walk*; Oro. *hembu*) are syncretic while the affixed forms (Eng. *walk-s*; Oro. *hembu-n*) are not. However, contrary to expectation, the affixed form in each case appears to be uniquely specified for features that are taken to be morphosyntactically unmarked. In H&R’s geometry this is either impossible (as in the case of 3P) or brings with it undesirable implications (as in the case of SG).

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4 The Orokaiva data is gleaned from Healey, Isorombo and Chittleborough (1969: 40, 59, 62) and cited in Baerman et. al. (2005: 26).
5. Cowper’s (2005a) feature geometry

Cowper (2004, 2005a) takes issue with H&R’s joint use of Minimal (singular) and Group (plural) to represent dual number in (8b). In its place she prefers the geometry in (10).

(10) Cowper’s (2005a) geometry of number

```
NUMBER
|   |
| >1 |
|   |
| >2 |
```

In this model, the interpretation of a given feature such as [>1] is relative to the system of contrasts in a language. In a language with a simple two-way number contrast, the feature [>1] receives a plural interpretation, as shown in (11a). In a language with a three-way system of contrast it receives a dual interpretation, as in (11b).

(11) Systems of number contrast according to Cowper (2005a)

a. 2-way contrast

```
NUMBER NUMBER
|   |
| >1 |
```

(singular) (plural)

b. 3-way contrast

```
NUMBER NUMBER NUMBER
|   |   |
| >1 | >1 |
|   |   |
| >2 |
```

(singular) (singular) (dual) (plural)

Commenting on the availability of the unmarked feature Minimal (for singular) in H&R’s geometry, Cowper points out that it allows for an unattested system in which singular is used contrastively while plural is not. She suggests that “in such a language,
singulants would be marked with respect to plurals, and the default interpretation of a bare [individuation] node would be [group], rather than [minimal]” (2005: 443). This unattested system would look like (12) (cf., Cowper 2004: 2).

(12) Unattested system permitted by H&R’s geometry

```
    INDV    INDV
  |        |
Min
(singular) (plural)
```

While a system such as (12) may indeed be unattested at the level of underlying contrasts (X₀s), it appears to be precisely the system that is operating at the level of VIs in English and Orokaiva verbs. In those cases, morphologically complex (i.e., affixed) VIs appear to spell out distinctively singular (and 3P) morphemes while plural (and NON-3P SG) morphemes appear to be spelled out by underspecified VIs.

Within Cowper’s model, morphosyntactically unmarked features are default interpretations of bare organizing nodes in the strictest possible sense: they are completely absent from the geometry. The possibility of specifying an unmarked feature is not an option. Thus, any apparent syncretism that runs counter to the expected pattern cannot be explained in terms of underspecification. It can only be attributed to accidental homophony.

It is worth noting that an appeal to rules of impoverishment cannot solve this problem. Impoverishment can only delete marked features, thereby extending the application of unmarked (or less marked) features. It cannot single out unmarked features to the exclusion of everything else, as required by languages like English and Orokaiva. If unmarked features such as 3P and SG are not available, then no deletion of features will produce the required syncretism without the need to posit homophones. For example, in
the case of English, deletion of person distinctions in the context of plural number (e.g., \([\text{PART}] \rightarrow \emptyset / [>1]\)) would still yield two phonologically null homophones: one representing plural (/-Ø/ [>1]), and one representing person in non-plural contexts (/-Ø/ [\text{PART}]), as illustrated in (13a). Similarly, deletion of number distinctions in the context of person (e.g., [>1] \rightarrow \emptyset / [\text{PART}]) would require the same two homophones, albeit with slightly different distributions, as illustrated in (13b).

(13) a.  

\[
\begin{array}{ccc}
\text{SG} & \text{PL} \\
/-s/ [ ] & /-Ø/ [\text{PART}] & /-Ø/ [>1] \\
\end{array}
\]

b.  

\[
\begin{array}{ccc}
\text{SG} & \text{PL} \\
/-s/ [ ] & /-Ø/ [>1] & /-Ø/ [\text{PART}] \\
\end{array}
\]

I have already suggested that, all else being equal, an account of English present tense verbs based on syncretism and underspecification is simpler than one based on homophony by virtue of requiring one unaffixed form instead of two (or more). However, it could be argued that all else is not equal since an account based on syncretism requires a revision of the proposed feature geometries — one that makes default features available for specification and, in so doing, potentially weakens the predictive power of the geometry. In the following section I argue that these revisions are independently motivated on theoretical grounds and that, therefore, all else is equal between the two analyses. If this is so, then the account based on syncretism and underspecification is not only more intuitive, but also much simpler than one that resorts to homophony.

6. The availability of default features

The data from languages such as English and Orokaiva suggests that morphosyntactically unmarked features should be available for specification in the
universal feature geometry. In this section I argue that this move is desirable on independent theoretical grounds. More specifically, I suggest that unmarked/default features must be available in the geometry in order for full interpretation to occur at LF. In order to shed light on this issue it is useful to compare underspecification in morphosyntax with underspecification in phonology (from which morphosyntax has borrowed the notions of feature geometry and underspecification).

Generative phonology typically recognizes two main levels of representation: an Underlying Representation (UR) and a Surface or Phonetic Representation (PR). The Underlying Representation is the phonological representation of a lexical item in long term memory. It is made up of phonological feature structures which may be underspecified. The Phonetic Representation is the representation that serves as the basis for phonetic implementation (i.e., motor commands for articulatory gestures). In most accounts, the Phonetic Representation must be fully specified in order for a word to be pronounceable (e.g., Avery & Idsardi 2001). Thus, Underlying Representations are underspecified and Phonetic Representations are fully specified, as illustrated in (14).

\[
\begin{array}{c|c}
\text{Phonology} & \text{Morphosyntax} \\
\text{UR} & \text{DS} \\
(\text{underspecified}) & (\text{fully specified } X^0\text{s}) \\
\hline
\text{PR} & \text{PF} \\
(\text{fully specified}) & (\text{underspecified VIs})
\end{array}
\]

At first glance, morphosyntactic feature representations appear to function in precisely the opposite way: the underlying representations (X$^0$'s) are maximally specified, while the surface forms (VIs) are underspecified. This, however, is the wrong analogy. The confusion stems in part from the fact that generative syntax assumes three levels of
representation, not two: D-Structure (DS), Phonological Form (PF), and Logical Form (LF). The $X^0$s of morphosyntax do not correspond to the Underlying Representations of phonology, and VIs do not correspond to Phonetic Representations as in (14). Rather, the fully specified Phonetic Representations of phonology correspond most closely to $X^0$s at LF. In other words, just as phonological PRs must be fully specified in order to be pronounceable, so we could argue that syntactic $X^0$s must be fully specified at LF in order to be interpretable. The Underlying Representations of phonology correspond to the VIs of morphosyntax: both are representations of lexical items in long term memory, and both are underspecified.

(15) A better correspondence between phonology & morphosyntax

If this is so, then what (if anything) do the $X^0$s at DS correspond to in phonology? I suggest that the $X^0$s at DS represent the system of contrasts available to the language. In this sense, they are analogous to the phonemes of a language which are contrastively specified. In contrastive specification, each element (phoneme or $X^0$) makes use of the minimum number of features necessary to maintain its distinctiveness within the system (Dresher 2003a, 2003b). Thus, contrastive elements are underspecified in relation to the universal geometry, but maximally specified in relation to other elements in the system. The VIs are lexical items that make use of these contrastive elements but may be further
underspecified so that they neutralize certain contrasts. This neutralization of contrast is what we call syncretism.

In phonology, only terminal features are pronounceable; underspecified organizing nodes are not. For this reason underspecified nodes must be completed at PR via the filling in of default features (e.g., Avery & Idsardi 2001). This requires that default features are available in the geometry as a matter of principle, even if they are rarely used contrastively. Correspondingly, I suggest that underspecified nodes are uninterpretable in morphosyntax, and that interpretation at LF is accomplished by filling in default features. If this is so, then default features must be available in the geometry as a matter of principle, even if they are rarely used contrastively in any language. Thus, a revision of the feature geometries proposed by Harley & Ritter (2002) and Cowper (2005a) is independently motivated.

7. Marking default features

What would a model of feature geometry need to look like in order to allow for the specification of default features? In order to answer this question, I will borrow some ideas from the model of phonological feature geometry proposed by Avery and Idsardi (2001; henceforth A&I). In A&I’s model, antagonistic pairs of features (e.g., [spread] glottis vs. [constricted] glottis) are organized under nodes representing dimensions (e.g., Glottal Width). These dimension nodes are subject to a non-branching constraint in order to reflect the antagonistic nature of their dependents. Since both of the dependent features of any given dimension are available in the geometry, either one may be specified contrastively. Thus, a dimension such as Glottal Width may be specified as either [spread] or [constricted] but not both.
Avery & Idsardi’s (2001) geometry of laryngeal features

For A&I, bare dimension nodes are not pronounceable. If a dependent feature is not specified, then the dimension must be completed with a default feature at the level of Phonetic Representation. Each dimension is assumed to have a universal default completion.\(^5\)

Assuming that morphosyntactic categories (e.g., person, number, gender, case, etc.) function like dimensions as defined by A&I; and assuming further that marked (non-default) features may have additional dependents, but that unmarked (default) features may not; then we might represent person and number features as in (17).

\(^5\) In some cases, default completion of underspecified dimensions may be context sensitive. For example, the default completion of Glottal Width may be [spread] in syllable onsets but [constricted] in syllable codas.
‘least complex’ dependent of any branching node; i.e., as the dependent without any (potential) further dependents in the universal geometry. By this definition [3p] is the default person and [1] is the default number.

As in the case of dimensions, I assume that all dependents of a dimension are subject to the non-branching constraint. For example, no X₀ or VI can be specified as both [2] and [>2] simultaneously. However, unlike dimensions, I assume that all dependents of a dimension are fully interpretable with or without any further dependents of their own. In the event that it is not further specified, the interpretation of a dependent feature is inclusive. It includes the interpretation of any further dependents within the universal geometry. Thus, if a system makes no further distinctions within the [>1] feature, then its interpretation includes [2] and [>2] (and the interpretation of any further dependents such as [3] and [>3]). If a system adds an additional contrast by specifying a further degree of markedness (in this case [>2]), then the interpretation of [>1] becomes restricted to that of its ‘lightest’ member [2] (i.e., dual).

An underspecified dimension will receive a default completion and interpretation at LF. Thus, in the vast majority of cases a language will not need to specify default features at the level of underlying contrast (X₀’s at DS). What is significant here is that a language may specify a default feature (at least optionally) since default features are available in the geometry. However, some conditions apply. First, the non-branching constraint rules out the possibility of structures such as (18) in which both marked and default features are jointly specified. Unlike H&R’s model, the joint specification of two antagonistic features (e.g., singular and plural) is not required to yield a distinct interpretation (e.g., dual). The model proposed here explicitly rules out such structures and avoids the undesirable prediction of H&R’s model that a language can only specify singular distinctively if it also has dual number.
(18) An ill-formed structure

```
* NUMBER
  
  1   >1
```

Second, I assume that default features cannot be specified distinctively unless the language has first made distinctive use of the marked feature. In other words we might say that the marked feature can never be a default. Thus, the model predicts the systems in (19) but rules out a system like that in (20).

(19) Two well-formed systems of contrast

```
a. NUMBER   NUMBER  b. NUMBER   NUMBER
       |       |       |       |
       >1   1   >1   1
(singular) (plural) (singular) (plural)
```

(20) An ill-formed system of contrast

```
* NUMBER   NUMBER
    |
    1
(singular) (plural)
```

The ill-formed system in (20) is the unattested system that Cowper (2005a) wanted to rule out (cf. (12)). Like Cowper’s model, the model proposed here also rules out this structure. Unlike Cowper’s model, however, the current model allows for a system such as (19b) in which both marked and unmarked features are specified. This is
precisely the system required to provide an account of English based solely on underspecification.  

Applying this model to the English data, I propose that English $X^0$s include structures like those in (21), where both marked and unmarked/default features may be specified.

(21) Underlying contrasts available in English ($X^0$s at DS)

<table>
<thead>
<tr>
<th>a. PERSON</th>
<th>PERSON</th>
<th>PERSON</th>
<th>b. NUMBER</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>3P</td>
<td>PART</td>
<td>PART</td>
<td>1</td>
<td>&gt;1</td>
</tr>
<tr>
<td>1P</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3$^{rd}$ p.) (2$^{nd}$ p.) (1$^{st}$ p.) (singular) (plural)

VIs may be fully specified or underspecified in any way with respect to the system of contrasts available in the language, provided they constitute sub-trees of the geometry. Thus, while a system like that in (20) is ill-formed as a system of contrast (i.e., applied to $X^0$s at DS), there is nothing to prevent VIs from having such specifications within a system of contrast like that in (19b) or (21b). Consequently, I suggest that VIs for English simple present tense verbs bear the feature specifications in (22).

---

6 This analysis entails an important prediction: a VI which is specified for an unmarked/default feature should not participate in syncretism. This is because unmarked/default features have no dependants in the geometry. Thus a VI representing the unmarked feature [1] can only spell out singular, and nothing else. This prediction is empirically verifiable and consistent with all instances examined in this paper.
The feature specifications in (22) correctly predict that the /-s/ forms will take precedence over the underspecified forms in spelling out 3rd person singular X^0s. As underspecified VIs, the unaffixed forms are able to spell out all other person-number combinations. Thus, the analysis proposed here accounts for the unexpected syncretism observed in languages like English without recourse to homophony.

8. Extending the analysis

In addition to the pattern of syncretism displayed in languages like English and Orokaiva there are other patterns of exceptional syncretism that have been problematic for accounts based on feature geometry and underspecification. In this section I look at two patterns, syncretism of non-adjacent features and diagonal syncretisms, and demonstrate that the analysis proposed for English can be extended to account for these.

8.1 Syncretism of non-adjacent features

Baerman et. al. (2005: 130) point out that feature geometries can only describe syncretism between features that are adjacent in the hierarchical structure. This point can be illustrated in reference to Cowper’s (2005a) number geometry in (10). Recall that,
according to Cowper’s model, a language which maintains a 3-way number contrast would represent that contrast as in (23a). This model treats number features as though they were hierarchically arranged as in (23b)

(23)  3-way number contrast according to Cowper (2005a)

\[
\begin{array}{ccc}
\text{NUMBER} & \text{NUMBER} & \text{NUMBER} \\
\text{singular} & \text{dual} & \text{plural}
\end{array}
\]

\[
\begin{array}{c}
>1 \\
>2
\end{array}
\]

Within this model only two patterns of syncretism can be expressed via underspecification: a) syncretism of dual/plural vs. singular as in (24a); and b) syncretism of singular/dual vs. plural as in (24b).\(^7\)

(24) Possible patterns of syncretism in underspecified VIs

\[
\begin{array}{ccc}
\text{NUMBER} & \text{NUMBER} & \text{NUMBER} \\
\text{singular} & \text{sing./dual} & \text{plural}
\end{array}
\]

\[
\begin{array}{c}
>1 \\
>2
\end{array}
\]

Each of these patterns involves syncretism of features that are adjacent in the hierarchy of (23b). Within this model there is no way to express syncretism of

\[\]

\(^7\) I am not counting the obvious possibility of syncretism involving all three number features via complete underspecification since it could be expressed in any model. Note, however, that complete syncretism also involves (successive) adjacency of features.
singular/plural to the exclusion of dual because singular and plural are not adjacent features. Any VI that is specified for the intermediate feature dual will also spell out plural in the absence of a fully specified plural form (as in (24a)).

According to the survey by Baerman et. al. (2005) syncretism of dual/plural vs. singular is the most common pattern of number syncretism cross-linguistically. Syncretism of singular/dual vs. plural also occurs, sometimes as the only pattern of number syncretism in a language. However, there are also instances of the unexpected singular/plural vs. dual pattern. This exceptional pattern only occurs alongside other patterns of number syncretism. Thus, while syncretism of adjacent features appears to be the most common and unconstrained pattern cross-linguistically, exceptional instances of syncretism involving non-adjacent features do occur.

One way of accounting for the full range of possible syncretisms might be to allow for parametric variation in the hierarchy of features. Different arrangements of the features across languages would yield different patterns of adjacency and, consequently, different patterns of syncretism. Notice, however, that all three patterns of syncretism can co-exist in the same language, as illustrated by the data from Kiowa in (25).\footnote{The Kiowa data in (25) is cited in Baerman et. al. (2005: 94) and attributed to Watkins (1984). For an alternative approach to the Kiowa number system within a Distributed Morphology framework see Harbour (2003).} Kiowa distinguishes three noun classes, each with a different pattern of number syncretism including the exceptional syncretism of singular/plural vs. dual. Thus, regardless of whether or not we invoke parametric variation, syncretism of non-adjacent features must be possible.
(25) Kiowa nouns (syncretism of adjacent and non-adjacent features)

<table>
<thead>
<tr>
<th></th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>‘horse’</td>
<td>‘tree’</td>
<td>‘apple’</td>
</tr>
<tr>
<td>SG</td>
<td>cęː̂ː</td>
<td>áː-dɔ̀</td>
<td>álɔ́x-bɔ́</td>
</tr>
<tr>
<td>DU</td>
<td>cęː̂</td>
<td>áː</td>
<td>álɔ́x</td>
</tr>
<tr>
<td>PL</td>
<td>cęː-gɔ́</td>
<td>áː-bɔ́</td>
<td>álɔ́x-bɔ́</td>
</tr>
</tbody>
</table>

In the proposed geometry, default features are available not only under the least marked node (the dimension node) but also under each node representing a subsequent degree of markedness. For example, in a system that distinguishes [>2] from [>1], the feature [2] serves as the default completion of [>1]. The default status of [2] under [>1] means that it need not be specified. However, the availability of [2] within the geometry means that it can be specified redundantly. This represents another instance of the marking of unmarked/default features, albeit at a different overall level of markedness. This option has the potential to produce syncretism of non-adjacent features. If a VI is uniquely specified with the feature [2] it will only spell out dual morphemes, leaving an underspecified VI to spell out [1] (for singular) and [>2] (for plural).

(26) Syncretism of non-adjacent number features

\[
\begin{array}{c|c}
\text{NUMBER} & \text{NUMBER} \\
\hline
>1 & 2 \\
\end{array}
\]

(singular/plural) (dual)

Thus, unlike other models of feature geometry, the proposed model allows for the potential syncretism of non-adjacent features. Once again we find that an exceptional
pattern of syncretism can be accounted for entirely in terms of underspecification if we admit the possibility of marking default features.  

8.2 Diagonal syncretisms

Another kind of exceptional syncretism is that which has been called diagonal syncretism (e.g., Béjar & Hall 1999) or polarity effects (e.g., Baerman et. al. 2005). These are cases of syncretism in which the syncretic forms do not share any common features. As an example of diagonal syncretism, consider the case of Hindi masculine class II nouns which are marked for number and case (in addition to masculine gender) as

9 Based on the structures in (26) we might expect the dual form to be morphologically complex and the syncretic singular/plural forms to be simple. Notice, however, that in the case of Kiowa class III nouns in (25) it is the syncretic singular/plural forms that are affixed. If we maintain an analysis like (26) for Kiowa then we must abandon any simple correspondence between morphosyntactic and morphological markedness (a move that is probably unavoidable either way).

10 Ultimately, the analysis sketched in (26) may not prove to be the best analysis for a language like Kiowa. According to Harbour (2003) the syncretic singular/plural affix in (25) realizes [inverse] number. In his analysis, Kiowa noun classes are inherently specified for certain number features. The [inverse] feature arises on DPs when the number features under the Number head (representing cardinal referentiality) conflict with those under the Class head (representing inherent class features). Thus, Harbour’s [inverse] feature is not a number feature on par with other number features, but something computed from them (or alternatively, “a mere label masking a more complex featural reality” whose precise nature remains unclear (2003: 101, footnote 14)). If this approach is taken then the singular/plural syncretism need not be attributed to underspecification. I will not pursue this issue here. My purpose is not to argue for a particular analysis of Kiowa, but only to demonstrate that it is possible, in principle, to account for the syncretism of non-adjacent features in terms of underspecification within the proposed model.
illustrated in (27). Notice the syncretism involving /-e/ forms which spell out two complementary sets of features: nominative plural on the one hand, and oblique singular on the other.

(27) Hindi masculine class II noun stems

<table>
<thead>
<tr>
<th></th>
<th>NOM</th>
<th>OBL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>ladk-aa</td>
<td>laḍk-e</td>
</tr>
<tr>
<td>PL</td>
<td>laḍk-e</td>
<td>laḍk-ō</td>
</tr>
</tbody>
</table>

In order to account for diagonal syncretisms such as this in terms of underspecification, we must assume that the syncretic form is highly underspecified and, hence, able to spell out seemingly incompatible sets of features. However, recall that within models of feature geometry like those of H&R (2002) and Cowper (2005a), morphosyntactically unmarked features are always underspecified. We have already seen that SG is widely recognized as the unmarked number feature. In the same way, NOM is generally taken to be the unmarked and default case feature. This is consistent with the facts of Hindi in which oblique noun stems appear only before case clitics marking specific case values such as GEN, DAT, or LOC, while nominative noun stems are those that appear in the absence of a case clitic. Thus, according to these models the /-aa/ form, which spells out NOM SG, should be the underspecified form. If this is so, then the /-e/ form cannot be underspecified since it would then be indistinguishable from the form ending in /-aa/. This is precisely the same problem encountered earlier in which we found that these models predict structural identity between underspecified and morphosyntactically unmarked forms (see (7)). Under these conditions, the syncretism displayed by the /-e/ form in Hindi cannot be true syncretism. It can only be accidental homophony.
If morphosyntactically unmarked features are available for specification within the geometry then a simple account of the diagonal syncretism in (27) becomes possible. If Hindi noun stems ending in /-aa/ are uniquely specified as NOM SG (much like English present tense verbs ending in /-s/ are 3P SG) then there is nothing to prevent the /-e/ forms from being underspecified for case and number. Assuming the simple case geometry in (28), the Hindi VIs in question would have the feature structures in (29).

(28)  
```
CASE
    NOM       OBL
    ACC, GEN, etc.
```

(29) Hindi masculine class II noun stems

```
laḍk-e  laḍk-aa  laḍk-ô
R
CASE     CASE     CASE
NUMBER   NUMBER   NUMBER
NOM      NOM      OBL
1        1        >1
(underspecified) (nominative, sing.) (oblique, plural)
```

In this analysis the /-e/ form is fully underspecified for case and number. As a result, it can spell out such incompatible sets of features as NOM PL and OBL SG. It fails to spell out NOM SG and OBL PL X₀′s only because more specific forms are available for these and they take precedence over the /-e/ form via the Elsewhere Condition.

In summary, we find that the proposed feature geometry, which was motivated by the exceptional pattern of syncretism found in languages like English, can be extended to provide a natural account of other kinds of exceptional syncretism, including syncretism of non-adjacent features and diagonal syncretism. All that is required in each case is the availability of morphosyntactically unmarked/default features within the geometry, and
the option of uniquely specifying these features. With these provisions a natural account of these exceptional syncretisms emerges – one that relies only on underspecification, and not on rules of impoverishment or homophony.

9. Marking the unmarked or marking markedness?

Before concluding it is worth considering an alternative account of diagonal syncretism proposed by Béjar & Hall (1999) (henceforth B&H). In this account, diagonal syncretisms are not the result of marking specific features, but of marking abstract degrees of markedness. For example, although the morphemes covered by the Hindi /-e/ form in (27) do not share any features in common, they do share the same overall pattern of structural markedness. A /-e/ form represents either one degree of markedness on the number dimension and zero markedness on the case dimension (i.e., nominative plural), or one degree of markedness on the case dimension and zero on the number dimension (i.e., oblique singular). As a result, B&H propose that VIs which participate in diagonal syncretism have abstract structural representations like that in (30a).

(30) a.            R
     |   |       b.            R
   DIM1  DIM2  c.            R
     |   |       CASE    NUMBER CASE    NUMBER
     X   OBL    GROUP

A VI with the specification in (30a) represents a single degree of markedness along one of two dimensions. As a result it can spell out either (30b) or (30c). This represents a different kind of underspecification in which the feature content is underspecified but not the geometric structure. If this kind of underspecification is
available, the question arises as to whether or not we still need the specification of unmarked features to account for diagonal syncretism. In the remainder of this section I argue that we do, and that ‘marking markedness’ does not obviate the need for ‘marking the unmarked.’

Consider the case of Hindi. If the Hindi /-e/ form has a representation like that in (30a) it will exhibit diagonal syncretism spelling out nominative plural on the one hand, and oblique singular on the other. Under these conditions, there appears to be no reason why the /-aa/ form must be specified for the unmarked features nominative and singular. It could be underspecified for case and number as predicted by the feature geometries of H&R (2002) or Cowper (2005a). However, while this analysis would be successful in accounting for the diagonal syncretism in Hindi nouns it makes the wrong prediction with respect to Hindi adjectives. Hindi adjectives agree with the nouns that they modify for gender, number, and case. However, only two masculine adjectival forms are distinguished, not three. Adjectives lack a distinct oblique plural form corresponding to the /-õ/ form of nominal stems. Compare (31) with (32).

(31) Hindi masculine class II noun stems

<table>
<thead>
<tr>
<th></th>
<th>NOM</th>
<th>OBL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>lād-aa</td>
<td>lād-e</td>
</tr>
<tr>
<td>PL</td>
<td>lād-k-e</td>
<td>lād-k-õ</td>
</tr>
</tbody>
</table>

‘boy’

(32) Hindi masculine adjectives

<table>
<thead>
<tr>
<th></th>
<th>NOM</th>
<th>OBL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>baď-aa</td>
<td>baď-e</td>
</tr>
<tr>
<td>PL</td>
<td>baď-e</td>
<td>baď-e</td>
</tr>
</tbody>
</table>

‘big’

In the absence of a distinct oblique plural affix, the ‘marking markedness’ analysis predicts that the /-aa/ form should be extended to spell out oblique plural morphemes. This is because the /-e/ form represents one, and only one, degree of
markedness along one, and only one, dimension (Hall, personal communication). It could not spell out oblique plurals since these would constitute a degree of markedness along two dimensions. This would leave /-aa/ to spell out oblique plural morphemes if it is underspecified for case and number.

Contrary to this prediction we find that /-e/ is extended to cover oblique plural morphemes, not /-aa/. This is exactly what we would expect in the proposed ‘marking the unmarked’ analysis where the /-e/ form is underspecified for case and number, while /-aa/ is uniquely specified as nominative and singular. As the underspecified affix, /-e/ serves as a default VI spelling out oblique plurals in the absence of a more specific VI. Thus, the ‘marking the unmarked’ analysis makes the right predictions with respect to syncretism in Hindi, while the ‘marking markedness’ analysis does not.

The model of underspecification proposed by B&H was originally motivated by the Old Church Slavonic data in (33). This scenario is more complex than that of Hindi since it involves three diagonal syncretisms within a single paradigm, as outlined in (34). Admittedly, in a case like this some means of marking degrees of markedness is desirable. Nevertheless, I suggest that even here the marking of morphosyntactically unmarked features is unavoidable.

(33) Old Church Slavonic neuter noun and adjective suffixes

<table>
<thead>
<tr>
<th></th>
<th>NOM/ACC</th>
<th>GEN</th>
<th>LOC</th>
<th>DAT</th>
<th>INS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG</td>
<td>-o</td>
<td>-a</td>
<td>-æ</td>
<td>-u</td>
<td>-emə</td>
</tr>
<tr>
<td>DU</td>
<td>-æ</td>
<td>-u</td>
<td>-u</td>
<td>-oma</td>
<td>-oma</td>
</tr>
<tr>
<td>PL</td>
<td>-a</td>
<td>-ə</td>
<td>-æxə</td>
<td>-omə</td>
<td>-i</td>
</tr>
</tbody>
</table>

(34) a. /-a/ genitive singular
     nominative/accusative plural
b. /-æ/ locative singular
    nominative/accusative dual
c. /-u/ dative singular
    genitive/locative dual
B&H assume a number geometry similar to that of H&R (2002) along with the case geometry in (35), where case values in brackets represent default interpretations of bare organizing nodes.

(35) The case geometry of Béjar & Hall (1999)

\[
\begin{align*}
\text{CASE (=} \text{Nominative)} & \quad \text{Accusative} & \quad \text{OBlique (=} \text{Genitive)} \\
& \quad \text{Locative} & \quad \text{THEMATIC (=} \text{Dative)} \\
& & \quad \text{Instrumental}
\end{align*}
\]

On the basis of these geometries, B&H treat the diagonal syncretism of /-a/ (34a) as the marking of a single degree of markedness. This is illustrated in (36). Similarly, they treat the syncretism of /-æ/ (34b) as the marking of two degrees of markedness, as in (37).

(36) a. /-a/ b. genitive sing. c. nom/acc plural

\[
\begin{align*}
\text{R} & \quad \text{DIM1} & \quad \text{DIM2} & \quad \text{CASE} & \quad \text{NUMBER} & \quad \text{CASE} & \quad \text{NUMBER} \\
& & & & & & \\
& & & & & & \\
& & & & & & \\
& & & & & & \\
\end{align*}
\]

(37) a. /-æ/ b. locative sing. c. nom/acc dual

\[
\begin{align*}
\text{R} & \quad \text{DIM1} & \quad \text{DIM2} & \quad \text{CASE} & \quad \text{NUMBER} & \quad \text{CASE} & \quad \text{NUMBER} \\
& & & & & & \\
& & & & & & \\
& & & & & & \\
& & & & & & \\
\end{align*}
\]
The third diagonal syncretism is that involving /-u/ in (34c). Unlike the others, it cannot be analyzed as an instance of marking degrees of markedness. This is because it collapses dative singular with genitive/locative dual, and these two case-number combinations do not have the same degree of markedness within the model that B&H assume. As a result, B&H analyze /-u/ as the underspecified default form claiming that “this syncretism can now be attributed to an elsewhere form, since we have now shown that the other two diagonally syncretic forms need not be considered default” (1999:7).

This is where the analysis of B&H breaks down. Recall that B&H are working within a model of feature geometry like that of H&R (2002) and Cowper (2005a) in which morphosyntactically unmarked features are not available and, hence, must be underspecified. This means that the Old Church Slavonic affix /-o/, which spells out nominative singular (see (33)), must be underspecified. If so, then /-u/ cannot be underspecified since it would then be structurally and featurally indistinguishable from /-o/, and we would have no way of predicting where each occurs. Thus, within the model assumed by B&H the syncretism displayed by /-u/ cannot be attributed to underspecification or to the marking of markedness.

B&H’s analysis of Old Church Slavonic can be salvaged, but only if we allow for the specification of morphosyntactically unmarked features. If /-o/ is uniquely specified as nominative singular, then there is no reason why /-u/ cannot be the underspecified default, as B&H propose. Thus, even if we adopt the ‘marking markedness’ analysis for languages such as Old Church Slavonic, which display multiple syncretisms within a paradigm, it does not obviate the need for ‘marking the unmarked.’
MARKING THE UNMARKED

8. Conclusion

Above all, this paper has argued that morphosyntactically unmarked features must be available within the universal feature geometry, and that languages must have the option of specifying such features (i.e., ‘marking the unmarked’), even if doing so entails some redundancy. I have briefly outlined what such a model of feature geometry might look like. The proposed model is able to account for a wide range of exceptional syncretisms entirely in terms of underspecification, without the need to posit homophones or rules of impoverishment.

Unlike H&R (2002), the proposed model avoids the undesirable implications that emerge from allowing the joint specification of marked and default features. More specifically, it avoids the prediction that a language will only make contrastive use of the unmarked singular feature if it has dual number. This is a significant improvement given that languages such as English, Orokaiva, and Hindi show evidence of marked singulars but lack a distinctive dual number in their systems.

Like Cowper (2005a), the proposed model rules out systems of contrast in which plural is the default interpretation of an underspecified number node. Unlike Cowper, however, it allows for the (optional) redundant specification of unmarked features. The model predicts two kinds of systems: those that specify only marked features, and those that specify both marked and unmarked features. The second type of system is not available in Cowper’s model and is admittedly redundant. However, the redundancy of the system suggests that it should be rare (i.e., exceptional), but not necessarily impossible; and this is exactly what we find.
References


