This dissertation is about the morphological influences on stress and pitch accent. Two basic types are identified. The first concerns Accent Resolution, the deletion of accent in words with more than one inherently accented morpheme. This deletion pattern is often ‘root-controlled’ in that it shows a preference for retaining the accent of the root, which underscores one important role for the morphology. The second influence is from affixes that idiosyncratically trigger one of several stem mutations: deletion of accent (or a ‘dominance effect’), insertion of accent (AKA ‘pre- and post-accentuation’), and shifts and retractions of accent. These affix-controlled processes are also morphological in that they are predicated on the application of a morphological process; in essence, they are accentual stem-formation rules.

A fundamental goal of this work is to explain the properties of these morpho-accentual phenomena with assumptions that are generally available in linguistic theory. This guiding principle is of inherent value, because it means that the analyses it produces are not limited to a specific theory of accent, a problem that has plagued much previous work. Moreover, there are abundant parallels between accentual and non-accentual morpho-phonology, and these parallels demand an explanation. For example, the characterization of Accent Resolution as root-controlled has many precursors in segmental phonology, e.g., root-controlled vowel harmony, that likewise assign a privileged status to roots. Observational similarities are also found with affix-induced processes. For example, pre-accenting suffixes have non-accentual analogs as well, like pre-lengthening suffixes found in many languages (Slovak, Yidiñ, Gidabal) that insert a timing unit in the stem. It would be a significant liability of any theory of accent if it failed to make a connection to these related phenomena.

The parallels between accentual and non-accentual phonology are explained with two logical developments in the theory of faithfulness constraints in Optimality Theory (OT, Prince & Smolensky 1993, McCarthy & Prince 1993). Faithfulness regulates input-output disparities by demanding identity between the two related strings. As such, Faithfulness is responsible for one of the most basic aspects of a language, the structural inventory. If faithfulness to a given structure outranks the constraints that prohibit it, this structure is present in the inventory and may produce contrast. This reasoning applies with equal force when prosodic features such as stress and tone are a part of a structural inventory. In the first chapter of this book, a theory of Prosodic Faithfulness is proposed to achieve this goal. Within Correspondence Theory (McCarthy & Prince 1995, 1999), a set of constraints is developed that distinguishes three faithfulness relations: the avoidance of accent deletion (\(\text{MAX-ACCENT}\)), accent insertion (\(\text{DEP-ACCENT}\)), and the migration of accent beyond its lexical source (\(\text{NO-FLOP-ACCENT}\)). Prosodic Faithfulness Theory is shown to provide the descriptive freedom required to account for the range of contrasts found in accent systems and to clarify the different faithfulness properties relevant to the study of morpho-accentual processes (discussed below).

The analysis of accentual contrast as a function of faithfulness leads to a natural explanation of root-controlled accent (RCA). In RCA, roots have a privileged faithfulness status: they retain accent where affixes lose it. The privileged faithfulness properties of roots follow from a relatively straightforward modification of faithfulness constraints. Converging sources of evidence (Steriade 1993, Beckman 1998) have led to the conclusion that there are distinct faithfulness constraints for roots and affixes, and that Root Faith always outranks Affix Faith (McCarthy & Prince 1995). These assumptions give a natural account of RCA: root accent systematically takes precedence over affix accent because the constraints responsible for realizing
root accent are top-ranked. The study of root-controlled Accent Resolution therefore provides further empirical support for morphologically segregated faithfulness, relating RCA to patterns of root-control found in other empirical domains, such as vowel harmony, dissimilation, and resolution of vowel hiatus (see especially Beckman 1998, Casali 1997, Suzuki 1998, and references therein).

The principal case of RCA studied in this work is the Uto-Aztecan language Cupeño. In addition, the accentual systems of Japanese and Russian are shown to fall within the scope of Root Faith. The study of these cases reveals a substantive restriction on the range of directionality effects. Patterns of directionality (e.g., ‘the leftmost/rightmost accent wins’) are also significant factors in predicting accent retention, which leads to the question of how phonological directionality and morphological root-control interact in Accent Resolution. A factorial typology produced by permuting the order of $\text{BEGEMOST}$ constraints relative to Root and Affix Faith shows that, all else being equal, root-control will always take precedence over directionality, a consequence that significantly limits the range of directionality effects in accent systems. This prediction is tested against a sample of unrelated languages and shown to be consistent with the observed patterns.

A second consequence of this analysis of RCA is that it clarifies important differences between root-controlled and affix-controlled accentual processes. First, the patterns of phonological activity are fundamentally different: Root Faith forces accentual alternations outside of the root, but affix-induced alternations are exclusively stem-mutating, often affecting roots. Second, the underlying motivations for root-controlled alternations are fundamentally different from affix-triggered processes. In the proposed analysis of RCA, the motivation for Accent Resolution is a set of phonological constraints that require culminative accent, i.e., constraints prohibiting more than one accent per word. The role of Root Faith is thus not as a trigger for alternations but as a means of predicting which accent is retained. Affix-triggered alternations are quite different because they are not driven by culminativity. This is illustrated by the behavior of dominant unaccented affixes such as $\text{-kko}$ ‘native of’ in Japanese: this accent-deleting suffix is itself unaccented, but it nonetheless triggers a deletion of accent in its base, e.g., $\text{koobe-kko} \rightarrow \text{koobe}$-kko ‘native of Kobe’. The motivation for deletion is therefore not due to phonological culminativity but something else.

Dominance effects illustrate a more general problem posed by morpho-phonological operations. This morphological deletion is lexically idiosyncratic, and yet its properties do not reduce to a lexical specification for phonological structure. The contrast between dominant (=accent-deleting) and recessive (=accent-neutral) affixes shows that dominance must be lexically listed. But the dominant/recessive distinction is orthogonal to the specification of accentual features, as shown by languages that have both dominant accented and unaccented morphemes. This problem reduces to a ranking problem in OT. In Japanese, for example, there is a contrast between accented and unaccented stems, which shows that the faithfulness for accent dominates whatever constraints might prohibit it. Dominant affixes, however, neutralize this contrast, which requires the opposite ranking.

Observations such as these lead to the conclusion that morpho-phonology involves more than the standard faithfulness-markedness interactions in OT. In particular, a new constraint type is proposed, anti-faithfulness, as a way of motivating morpho-phonological alternations. Anti-faithfulness constraints are simply negations of existing faithfulness constraints. Morpho-phonological alternations are thus motivated as obligatory violations of faithfulness. This approach directly addresses the lexical listing problem because morpho-phonology need not be listed. Dominance effects, for example, follow naturally as forced violations of the constraint that specifically prohibits the deletion of accent, i.e., $\text{MAX-ACCENT}$. Several non-trivial results also follow from the introduction of anti-faithfulness, providing formal analyses of two thorny problems, namely non-structure preserving morpho-phonology and exchange processes.

A number of properties of affix-controlled accentual processes are identified and shown to follow from the anti-faithfulness thesis when this constraint type is integrated in recent theories of output-to-output correspondence (Benua 1997, Burzio 1996, Kenstowicz 1996). Affix-controlled accent is (I) morphologically triggered, (II) stem-mutating, and (III) grammar
dependent. (I-II) follow from the implementation of anti-faithfulness in OO-correspondence, i.e.,
the premise that anti-faithfulness constraints operate on morphologically related words. Forcing an
alternation in a pair of words ensures that affix-controlled processes are morphological, because
they contrast two word classes. Furthermore, as a relation between words, anti-faithfulness only
affects the interval of the word that occurs throughout a paradigm, namely the stem (II). Finally,
anti-faithfulness does not fully specify how a pair of words should differ accentually, so its
specific effects depend on the larger grammar in which it is embedded (III).

Affix-controlled accentual processes are investigated in a series of case studies. It is
argued that anti-faithfulness constitutes an integrated theory of the diverse morpho-accentual
phenomena found in these languages. Dominance effects in Japanese and Russian are examined
and shown to follow from the anti-faithfulness constraint, ¬\textsc{Max-Accent}, which specifically
requires a deletion of accent in the stem. Obligatory violations of other faithfulness constraints
extend the theory and provide a framework for explaining other affix-triggered processes. Forced
violations of \textsc{Dep-Accent} motivate accent insertions, which forms the basis of a theory of pre-
and post-accentuation in Cupeño and Japanese. Negation of \textsc{No-Flop-Accent} likewise motivates
accentual alternations and is employed in the analysis of accentual shifts and retraction in
Limburg Dutch, Japanese, and Aguaruna (Jivoroan). The fundamental notion of faithfulness thus
has a role in the analysis of affix-controlled accent too, through the negation of the independently
motivated Prosodic Faithfulness constraints.

The ideas that form the core of a theory of morphological accent have very general
applications in phonology. The notion of faithfulness crucial to the analysis of phonemic accent is
no less important in the analysis of other types of phonemic contrast. Furthermore, the privileged
faithfulness status afforded to roots in accentual systems is also characteristic of non-accentual
phonology, and thus the role of Root Faith extends to both types of systems. Lastly, the theory of
affix-controlled accent as obligatory faithfulness violations also has some currency in segmental
phonology: it is the basis of a general theory of morpho-phonology and it is indispensable to the
analysis of operations that do not reduce to the standard faithfulness-markedness rankings.

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