Vogel (2019): Life after the Strict Layer Hypothesis

1. From Vogel (2009) to Vogel (2019)

The Vogel 2009 already argued for two ideas:

1. The original **Strict Layer Hypothesis (SLH)** is too restrictive, especially because it forces clitics and other small elements to be promoted to categories they do not really behave like; and
2. A constituent between the phonological word and the phonological phrase—the Clitic/Composite Group—can often do the work that other approaches assign to recursive phonological words.

Then Vogel 2019 asks the next question:

3. Once we weaken the SLH, what keeps prosodic structure from becoming too free?

Level-skipping solves some old problems, but unrestricted skipping allows far too many trees. Recursion can reduce the number of category *labels*, but it often creates an inner C and an outer C' that have different phonological properties. Vogel therefore develops a more explicit alternative: the **Composite Prosody Model**. Its key move is to keep a distinct κ constituent and to replace the single strong SLH with a small set of more targeted restrictions.

2. Pros and cons of the SLH

The old SLH required strict succession:

$$C_n \rightarrow C_{n-1} \quad \text{only.}$$

Italian clitics: the promotion problem

Under the SLH, a sequence such as *lo si serve* 'one serves it' would require *lo* and *si* to be promoted to phonological words so that the next higher constituent could dominate only ωs. But those clitics do not have ordinary ω properties: they are too small, do not bear normal lexical stress, and do not participate in ω phonology. *(6)*

Northern Italian **Intervocalic s-Voicing (ISV)**:

$$/s/ \rightarrow [z] \;/\; [V_V]_\omega.$$

Inside genuine ω we get:

$$[i[z]ola]_\omega \text{ 'island'}, \qquad [famo[z]o]_\omega \text{ 'famous'}.$$

But across the clitic sequence, *lo si compra* remains [lo si ...], not *[lo zi ...]. And if *lo si* itself were a ω, we would also expect ω stress/lengthening, roughly *[ló:zi], which is not what happens. *(7)*

The SLH is forcing the grammar to call something a ω even though the very diagnostics for ω-hood say that it is not one.

3. The two familiar repairs: level-skipping and recursion

3.1 Level-skipping helps, but it cannot be free

Italian *sfida* 'challenge': initial /s/ is excluded from the onset with /f/ and can be parsed directly at the ω level, skipping syllable and foot structure. In *caserma* 'barracks', a light initial syllable /ca/ that cannot join the main foot can likewise be parsed at the ω level, skipping the foot. *(8)*

That makes the obvious repair to *lo si serve* quite natural:

$$[lo_\sigma \; si_\sigma \; [serve]_\omega]_{C_n}.$$

The clitics are licensed in a higher constituent without being falsely promoted to ω. The ISV prediction is then correct: the relevant intervocalic contexts cross the ω boundary, so /s/ stays [s]. *(9)*

Skipping is also proposed higher in the hierarchy. (Selkirk's analysis of Xitsonga: a final ω can be parsed directly in an ι, skipping ϕ, because a ϕ boundary would incorrectly block High Tone spread.) *(10)*

The restrictedness problem: If skipping is unrestricted, a ϕ could dominate a ω plus a stray foot, syllable, mora, or even segment—on either side, in various orders, createing a distinct environment for edge or juncture rules and a huge predicted typology.

3.2 Lower-level recursion is suspicious

Vogel's critique:

> If an inner C and an outer C' are really instances of the *same* constituent type, we expect them to share the defining properties of that type. But many proposed lower-level recursive structures do not.

Several examples.

English syllables: In *lapse* and *stab*, an outer recursive σ' can include the consonant that the ordinary inner σ excludes under the Sonority Sequencing Principle. So the inner and outer "syllables" obey different structural conditions. *(11)*

English foot structure: A recursive analysis of *Canada* lets the lower Σ stay binary while an upper Σ' contains the extra syllable. Again, the outer object does not have the same size property as the lower foot. *(12)*

Italian word + clitics: In *teléfona me lo* 'telephone it to me', stress is legal inside the verb's three-syllable ω window, but it is fifth from the end of the larger clitic-containing ω'. So the basic ω and the extended ω do not have the same stress grammar. *(19)*

English compounds: The words *políce* and *acádemy* have ordinary word stress, but the compound *police academy* has compound-level prominence. A phrasal combination has yet another stress pattern. If the compound is just an outer ω', the notation hides the fact that the larger domain has a different phonology. *(15)–(16)*

Hungarian vowel harmony: Harmony can hold inside each ω but fail across members of a compound, e.g. *olvasó terem* 'reading room', whose two members belong to different harmony classes. Again, the compound-sized domain is not simply "the same ω one level up." *(19)*

The prime in C' often acts like a hidden category label. If C and C' have systematically different phonology, it is clearer to recognize two constituent types.

3.3 Higher-level recursion may be possible

Xitsonga ι: Selkirk's recursive analysis places Penultimate Vowel Lengthening at the right edge of both the smaller ι and the larger ι'. Here the two levels really do seem to share an edge property. *(17)*

This is why the strongest version of Vogel's model excludes recursion everywhere, but the paper leaves open the possibility that the higher, syntax-facing ϕ/ι portion may need some recursion.

4. Two post-SLH alternatives

	Briefly	**Vogel's concern**
Match Theory	Very direct morphosyntax–prosody mapping. Uses a small set of basic labels: Clause $\rightarrow \iota$, Phrase $\rightarrow \phi$, Word $\rightarrow \omega$.	Recursive C_{max}/C_{min} distinctions create more effective domains than the label count suggests. Stray material can be parsed in many possible higher positions, and different positions predict different phonological behaviors.
The Adjunction Approach	Is more restrictive than Match Theory below ϕ: Stray elements adjoin to an extended ω: captures useful generalizations such as the shared behavior of English *-s*.	The larger domain is still called ω', even though it systematically differs from the core ω. Headedness not mentioned.

5. The Composite Prosody Model

Renaming: $\boxed{\omega < \omega' < \phi}$ $\Rightarrow$ $\boxed{\omega < \kappa < \phi}$

The **Composite Group** κ contains an ω (or several ωs in a compound) together with associated "stray" material: Level-2/non-cohering/unproductivs affixes, clitics, and other function words. This replaces the vague idea of an "extended ω" with a distinct constituent whose different phonology is expected rather than problematic.

Italian ISV: a clean ω vs. κ diagnostic

Inside the ω, ISV applies:

$$[[caserm - a]_\omega]_\kappa \rightarrow [kazerma] \text{ 'barracks'}$$

$$[[noi - os - in - o]_\omega]_\kappa \rightarrow [nojozino] \text{ 'somewhat annoying'.}$$

But across material that belongs to the larger κ, /s/ stays [s]:

$$[lo_\sigma\ si_\sigma\ ri_\sigma\ [sala]_\omega]_\kappa \quad \text{'one re-salts it',}$$

$$[[comprando]_\omega\ se_\sigma\ lo_\sigma]_\kappa \quad \text{'buying it for oneself',}$$

$$[[porta]_\omega\ [sapone]_\omega]_\kappa \quad \text{'soap dish'.}$$

(27)–(28)

The particularly nice contrast is the prefix *ri-*. A lexicalized Level-1 *ri-* belongs inside the ω and allows voicing:

$$[ri - salire]_\omega \rightarrow [rizalire] \quad \text{'date back to',}$$

whereas productive Level-2 *ri-* 're-' is outside the ω:

$$[ri_\sigma[salire]_\omega]_\kappa \rightarrow [risalire] \quad \text{'go up again'.}$$

(29)–(30)

Italian [ʎ]: ω-edge phonotactics need not be κ-edge phonotactics

The Italian orthographic *gl* is [gl] rather than the palatal lateral at the beginning of a ω (*glicine* 'wisteria'), but the palatal lateral is allowed in a clitic syllable elsewhere inside κ, as in *gli smalti* 'the enamels' and *dandoglielo* 'giving it to him'. This implies restriction on the left edge of ω does not automatically become a restriction on the left edge of κ. *(31)–(32)*

English *-s*: different syntax, same κ phonology

English plural, 3sg, possessive, copular, and auxiliary *-s* all show the same voicing pattern after a voiced segment:

$$[[fan]_\omega s]_\kappa \quad \text{plural / 3sg,}$$

$$[[Dan]_\omega s]_\kappa \quad \text{possessive / copula / auxiliary.}$$

In *The cat in the barn's found a mouse* and *The cat in the barn's female*, the *-s* surfaces as [z] because it interacts phonologically with *barn* on its left, even though syntactically it belongs with material to the right. (A prosodic constituent may *not* simply copied from syntax.) *(33)–(44)*

Turkish PWAs: stress tells us where ω ends

Turkish regular stress is ω-final. In a form without an L2 affix, all the suffixes can be inside the ω:

$$[[sev - il - di - \mathbf{niz}]_\omega]_\kappa \quad \text{'you were loved'.}$$

With negative *-me* (a PWA) the ω closes before that affix, so stress falls immediately before it:

$$[[sev - \mathbf{il}]_\omega\ me_{PWA}\ di\ niz]_\kappa \quad \text{'you were not loved'.}$$

(40)

The same logic for English L1 *in-* vs. L2 *un-*: the former belongs inside ω and can participate in complete nasal assimilation (e.g. *irresponsible*); the latter is a PWA outside the ω (e.g. *unresponsive*). *(41)*

Italian clitic i e alternation: κ itself is the domain

The Composite Group is not merely "where non-ω material is stored." It can itself define phonological processes. Italian dative *mi* changes to *me* before another appropriate clitic when both are inside the same κ:

$$[me\ lo\ [porta]_\omega]_\kappa \quad \text{'he brings it to me',}$$

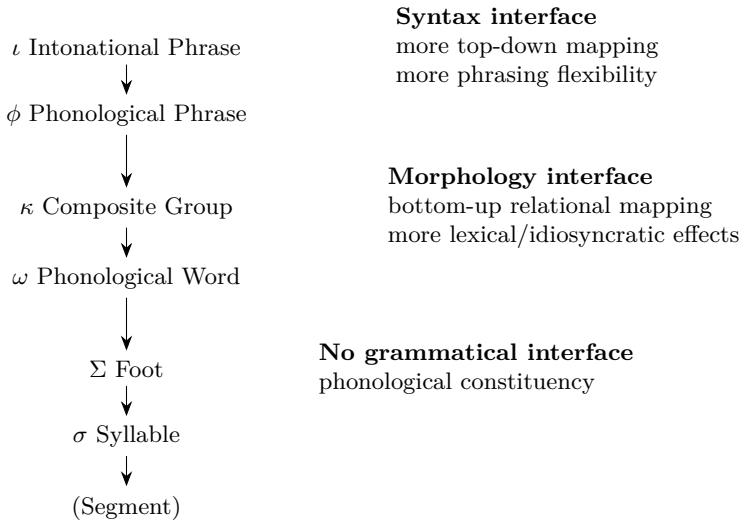
$$[[porta]_\omega\ me\ lo]_\kappa \quad \text{'bring it to me!'.}$$

But when the two clitics belong to different κs, as in *porta mi lo specchio* 'bring me the mirror!', the change is blocked. *(43)*

6. The five principles

Principle	Interpretation
Constituent Sequencing	A constituent may dominate only lower-ranked constituents. Downward skipping is allowed; same-level and upward recursion are excluded in the strongest version.
Proper Headedness	Every nonterminal C_n must immediately contain at least one C_{n-1}. Some stray material can skip a level, but the constituent still has a genuine head of the immediately lower type.
Minimal Distance	Put material in the *first available* prosodic constituent. A clitic that cannot join ω goes into κ, rather than being free to attach at ϕ, ι, etc.
Morphological Core	A ω must contain a morphological root. "Phonologically substantial" function words or affixes can be feet without automatically becoming ωs. (This blocks analyses in which a bare affix or function word is promoted to an ordinary ω merely to satisfy layering.)
Morphological Maximum	A κ contains maximally one lexical word. A compound counts as one lexical word even though it may contain several phonological words.

7. The Prosodic hierarchy (revisited): three different interface zones



The Composite Group is the key **bridge**. Lower-level prosodic "allegiance" can survive even when it does not line up with the syntax. *Fig 1.2–1.3*

Take-away.
Do not call two systematically different domains the same constituent just because one contains the other.
Rather, integrate them into a full theory that allows necessary skipping, gives the word+stray material domain **its own category** κ, and use a small set of geometrical principles to stop the post-SLH hierarchy from becoming unconstrained.