

Off Phases: It's All Relative(ized)

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Abstract

This paper argues that Phase Theory (Chomsky, 2000, 2001) can be subsumed by a theory of locality based on Relativized Minimality (Rizzi, 1990). Any phrase head can induce phase-like locality effects for a particular dependency, if it bears the relevant feature. C has no special status; while it reliably induces locality effects in A-bar dependencies, we find crosslinguistic variation in whether it induces locality for other dependencies. Phrases like TP induce locality effects for A-dependencies when they bear phi-features. Examining crosslinguistic patterns in long-distance A-dependencies, we tease apart the predictions of phase-based and minimality-based locality and show that minimality fares better.

1 Introduction: Absolute and Relative Locality

A central assumption in syntactic theory is that relations between syntactic elements are constrained by locality: dependencies are possible only when the relevant elements are sufficiently close in a structural sense. Standardly, two distinct notions of locality are recognized: absolute locality and relative locality. Absolute locality refers to configurations in which certain syntactic domains—such as islands—are completely inaccessible to operations originating outside them, such that elements contained within these domains can never enter into local relations with external elements. Relative locality, by contrast, captures the idea that a dependency between two

elements is permitted only if no intervening element of the appropriate kind disrupts their relation. Although many theoretical frameworks appeal to both notions, Minimalist theories (as well as earlier generative approaches) have often relied on absolute locality to constrain dependencies spanning multiple clauses. In this paper, we revisit the empirical and conceptual basis for absolute locality as implemented in Phase Theory (e.g. Chomsky, 2000, 2001). We argue that the phenomena commonly attributed to phases can instead be derived from Relativized Minimality (see Abels, 2003; Torr, 2012; Keine and Zeijlstra, 2025), and moreover that an analysis grounded in minimality yields broader and more accurate empirical coverage of cross-clausal dependencies than one based on phases.

1.1 Absolute Locality and Phasality

Absolute locality, with roots in Ross’s (1967) notion of strong islands, Huang’s (1982) Condition on Extraction Domains (CED), and Chomsky’s (1986) Barriers, characterizes syntactic domains that categorically block extraction, including configurations such as clausal subjects and adjuncts. In later generative work, beginning with Chomsky (2001), this conception of locality has been recast in terms of phases (especially Chomsky, 2000, 2001, 2008). Within Phase Theory, particular constituents are designated as phases and define domains of absolute locality; syntactic derivations proceed via cyclic Spell-Out (or Transfer) whenever such a domain is completed. Two variants of Phase Theory have been proposed. The present paper considers the strong version (though nothing crucial in our argumentation hinges on that choice), according to which the completion of a phase triggers Spell-Out of its complement, rendering that material unavailable to further syntactic operations. Accessibility is restricted to the phase head and its specifiers—the so-called phase edge—as additional structure is assembled. This constraint is captured formally by the Phase Impenetrability Condition (PIC), stated in (1).

- (1) *Phase Impenetrability Condition* (Chomsky, 2000, 108): In phase α with head H, the

domain of H is not accessible to operations outside of α , only H and its edge are accessible to such operations.

Phase Theory instantiates a form of absolute locality insofar as constituents designated as phases categorically prevent syntactic dependencies from crossing the phase head. This immediately raises the issue of how phasehood is determined, namely, which syntactic objects qualify as phases. In the original formulation of Phase Theory, Chomsky (2000, 2001), followed by much subsequent work, identify CP and (transitive or unergative) ν P as phases in the verbal domain, a proposal that can be traced back to Chomsky (1986). More recently, however, a wide range of alternative views has been advanced. These include proposals according to which every phrase counts as a phase (Bošković, 2002; Boeckx, 2003; Müller, 2004, 2010, 2011; Boeckx and Grohmann, 2007, see also Manzini, 1994, and Takahashi, 1994), approaches that treat every syntactic operation as constituting a phase (Epstein and Seely, 2002), and analyses in which phasehood is determined contextually rather than categorically (Bošković, 2005, 2014; den Dikken, 2007; Gallego and Uriagereka, 2007; Gallego, 2017; Takahashi, 2010). More recently still, a growing body of work has argued that while CP should be retained as a phase, ν P should not (Grano and Lasnik, 2018; Keine, 2020a,b; Mendes and Ranero, 2021; Keine and Zeijlstra, 2025). In particular, Keine and Zeijlstra (2025) argue on the basis of evidence from (Standard) Indonesian, Dinka, and Defaka that effects traditionally attributed to ν P phases are more adequately derived from Relativized Minimality, leading them to conclude that ν P phasality can be abandoned altogether.

Despite these divergent proposals, there is nonetheless widespread agreement (with the notable exception of den Dikken, 2017) that CP constitutes a phase, a position with roots in earlier work by (Chomsky, 1973, 1977, 1981). By contrast, the status and distribution of other potential phase heads, including ν P as well as DP and PP, remain unsettled and are still subject of considerable debate.

How can we establish whether a given syntactic category functions as a phase? As mentioned above, the Phase Impenetrability Condition (PIC) predicts that phase heads prevent dependencies

from being established across them; only the phase head itself and its specifier remain accessible to higher elements in the structure. Consequently, to create a dependency between an element outside the phase and one situated within the phase complement, the lower element must first move to the phase edge (its specifier). The observable pattern of successive cyclic movement—where an element involved in a long-distance dependency passes through intermediate specifier positions—is therefore consistent with the predictions of Phase Theory and has been cited as empirical support for CP phasality in various languages and constructions. Consider, for example, Irish C in declarative clauses, which is realized as *go* (*gu-r* in past tense) both in main and embedded clauses. When a *wh*-element or another constituent undergoes A-bar movement to Spec,CP, however, the C-head changes to *aL* (realized as *a* in the embedded contexts below). Interestingly, in cross-clausal movement, the embedded C-head also surfaces as *a*, indicating that the *wh*-element passes through the embedded Spec,CP en route to the matrix Spec,CP (McCloskey, 2002, 186-187).¹

- (2) a. Creidim [_{CP} gu-r inis sé bréag.]
 believe.1SG C-PST tell he lie
 ‘I believe that he told a lie.’ (McCloskey, 2002, (3), glosses modified)
- b. [_{CP} Céacu mac_i a thóg t_i an teach sin?]
 which son aL raise.PST the house DEM
 ‘Which of the sons built that house?’ (McCloskey, 2001, (66a))
- c. [_{CP} Cé_i a dúradh léithi [_{CP} t_i a cheannódh t_i é?]]
 who aL said.PST with-her aL would-buy it
 ‘Who was she told would buy it?’ (McCloskey, 2001, fn.23, (ii))

The successive cyclic movement through CP edge can also be seen in various varieties of German and Frisian where overt *wh*-copies are realized in the lower Spec,CP position (Hiemstra, 1986):

- (3) a. [_{CP} Wen glaubst Du, [_{CP} wen sie getroffen hat]]?
 Who think you who she met has
 ‘Who do you think she has met?’

- b. [_{CP} Wêr tinke jo [_{CP} wêr 't Jan wennet]]?
 Where think you where that Jan resides
 'Where do you think that John lives?' (Hiemstra, 1986, p. 99)

Similarly, English- and French-learning children sometimes also produce similar examples (Thornton, 1990; Oiry and Demirdache, 2006).

Another type of evidence for successive cyclic movement through CP comes from *wh*-intervention effects, as in (4). Here, Spec,CP is already occupied by a *wh*-term; hence no other *wh*-element may land there. If *wh*-movement into the matrix clause could take place in one fell swoop, this movement should in principle still be possible (unless, of course other island/intervention effects block it), contrary to fact.

- (4) *Who_i do you wonder [_{CP} **why** (that) she invited t_i]?

This type of evidence for successive cyclic movement through CP for long-distance A-bar dependencies is strong and cross-linguistically pervasive, and we have no reason to dispute the conjecture of obligatory intermediate landing sites for movement. However, the question is open as to whether this obligatory successive cyclic movement, in fact, provides *evidence* for CP phasality. As we turn to below, the empirical footprint of successive cyclic movement is actually compatible with both absolute and relative notions of locality.

1.2 Relative Locality and Phasality

While the idea of CP phasality has garnered broad consensus due to the pervasive evidence for obligatory successive cyclic movement through CP edges across languages, Keine and Zeijlstra (2025) argue that classical arguments in favor of (vP)-phasality are not conclusive and that alternative accounts, in terms of relative locality, may actually fare better in accounting for the empirical facts that have been taken to indicate (vP)-phasality. Hence, the question arises of whether CP-phasality, the hallmark of Phase Theory, can also be captured in terms of Relativized Minimality.

In the next section, we spell out what such a minimality-based approach to (CP)-phasality amounts to, primarily following ideas by Abels (2003). As we will see, if minimality can account for successive cyclic movement in the C domain, then there is no intrinsic property that singles out C as a special head. Rather, a minimality-based approach predicts that the types of locality effects found with C should also be attested around other heads. In sections 3 and 4, we explore this prediction by looking at long-distance A-dependencies (raising and long-distance agreement). In both of these domains, we find that the empirical picture favors a general minimality-based approach over phases: not only do CPs lack expected phase effects for A-dependencies in some languages, but other phrases, like TPs, do show the expected effects. As predicted by Relativized Minimality, the distribution of phi-features is implicated across languages in the specific locality patterns for A-dependencies.

2 A Minimality-based Approach to Phase Effects

Abels (2003) is the first and foremost approach that aims at accounting for phasality effects, or more specifically, the necessity for intermediate landing sites in case of extraction out of certain domains, in terms of Relativized Minimality. Here we'll look at how his proposal derives successive cyclic A-bar movement.

2.1 Enforcing A-bar Movement Through the CP Edge

Concretely, Abels' proposal builds on two assumptions. First, Abels implements Relativized Minimality in the domain of phasality in terms of Attract Closest (Chomsky 1995), which is defined as follows:

- (5) Attract Closest: If a head K attracts feature F on X, X a feature bearer of F, no constituent that bears F is closer to K than X is.

- (6) Closeness: Y is closer to K than X is if K c-commands Y and Y c-commands X.
- (7) Feature bearers: A is a feature bearer of feature F iff A is a constituent and the label of A contains F.

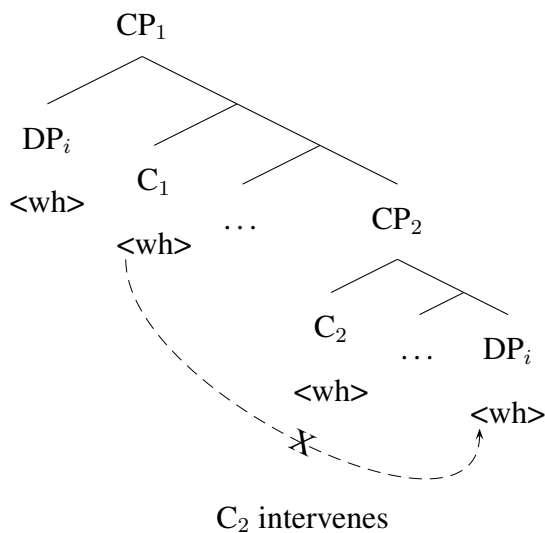
In order to see how this works, let's for the sake of illustration assume that matrix C is endowed with some feature [Wh] that attracts the *wh*-phrase. Now, further assume that not only matrix C but every C-head carries such a feature, irrespective of whether it is (or ends up being) an interrogative C-head or not. The moving *wh*-terms (trivially) carry [Wh] as well.²

Under these assumptions, obligatory successive cyclic movement of *wh*-terms directly follows. To see this, take the following minimal pair:

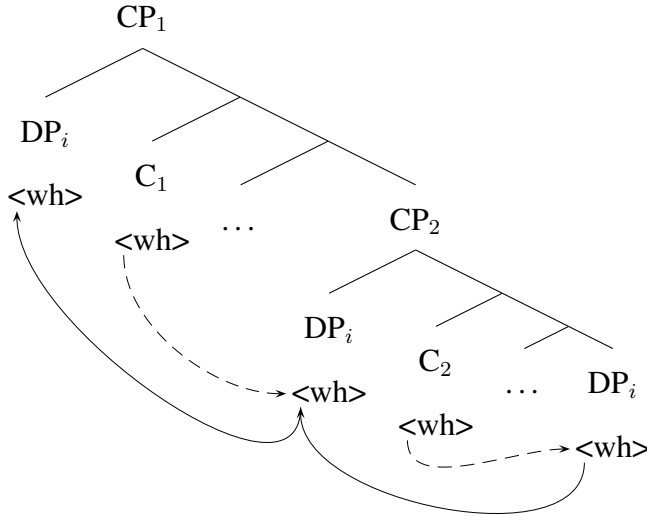
- (8) *What_i do you think [_{CP} that Mary bought t_i]?
- (9) What_i do you think [_{CP} t_i that Mary bought t_i]?

The difference between (8) and (9) is that in (8) the *wh*-term moves in one fell swoop to matrix Spec,CP while in (9) it does so by making an intermediate landing in embedded Spec,CP. The underlying structures of (8)-(9) are (10)-(11), respectively.

- (10) *[[_{CP} DP_i C [_{CP} C DP_i]]



(11) [_{CP} DP_i C [_{CP} DP_i C DP_i]]



In (8)/(10), matrix C c-commands embedded C, and embedded C c-commands the DP. Consequently, given Attract Closest, when matrix C₁ probes for [Wh], DP_i is out of reach: embedded C₂ is a closer, feature-bearing intervener between matrix C₁ and the DP.

However, in (9)/(11) there is no intervention. Here, embedded C₂ first attracts DP_i to its specifier. Nothing intervenes between C₂ and the DP. Next, matrix C₁ attracts the DP into matrix Spec,CP. Note that this embedded CP, even though it bears a [Wh] feature, does not act as an intervener as it does not c-command its specifier.³

Hence, obligatory successive cyclic movement follows straightforwardly without any recourse to phasality. However, it only does so under the assumption that not only do matrix C and the DP carry some [Wh] feature, but that embedded C does too, even though its exponent *that* is not an interrogative complementizer and can survive without attracting a *wh*-term. Here, Abels' second assumption comes into place. Abels assumes that every C-head is universally endowed with a feature he dubs [clause-type]. This feature, for him, is special in the sense that does not have to be checked but that when it is unchecked will receive a default value *declarative* rather than causing ungrammaticality.⁴

Let us see how Abels' approach works for some examples:

(12) a. I said that Mary bought a car.

- b. Who said that Mary bought what?
- c. What_i did you say <what_i> that Mary bought?

In (12a), embedded C is not checked by any *wh*-term. It remains unchecked and surfaces as a (default) declarative. In (12b), embedded C also remains unchecked because the embedded *wh*-term remains in situ. Again, embedded C surfaces as a (default) declarative. However, for (12c), more needs to be said. Here, embedded C attracts the *wh*-term but does not get checked/valued by it, even though it lands in its specifier. For Abels, the reason is that the *wh*-term can only check one of its attractors and since it is closer (in the sense of (6)) it will only check matrix C and not embedded C.

Abels' proposal is not free of problems. For one, it remains unclear why in (12c) the *wh*-term is attracted by embedded C, while this is not the case in (12b). One cannot say that in (12c) the *wh*-term must move to embedded Spec,CP in order for matrix C to attract it, as that would involve *look ahead*. Second, the step that in (12c) only highest C gets checked by the *wh*-term is rather stipulative.

At the same time, various solutions have been proposed for these problems. Bošković (2007), for instance, has proposed that *wh*-terms not only have an interpretable [Wh] feature, but also an uninterpretable [uQ] feature. In addition, he assumes that only interrogative C—but crucially not declarative C—carries a feature [Q] that checks off [uQ] on a *wh*-term. Then, every *wh*-term that carries [uQ] will automatically move across a declarative C-head as otherwise it will not be able to be checked. Only if the *wh*-term lacks a feature [uQ] can it stay behind. In that case, no clause-external C-head can attract it. This indeed explains cases like (12c), although it does not account for the lack of movement in (12b). In more recent work, the notions and loci of checking and valuation have been disentangled as well (Pesetsky and Torrego, 2007; Arregi and Nevins, 2012; Bjorkman and Zeijlstra, 2019), where valuation follows checking and can be delegated to PF. If lower copies are deleted prior to valuation, it follows that only overt copies can value a local C.

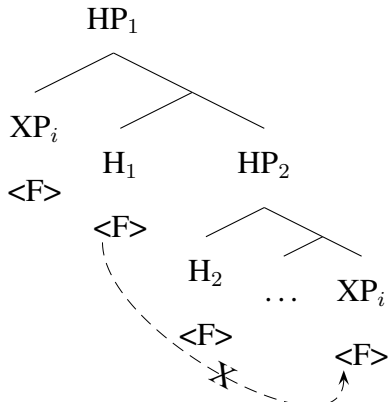
Given the above, we concur with Abels that one can maintain that both declarative and inter-

rogative C-heads and *wh*-terms share some feature (like [clause-type]) that underlies obligatory successive cyclic movement. The problems his 2003 account faces can be rescued by adopting some additional, more recent assumptions.

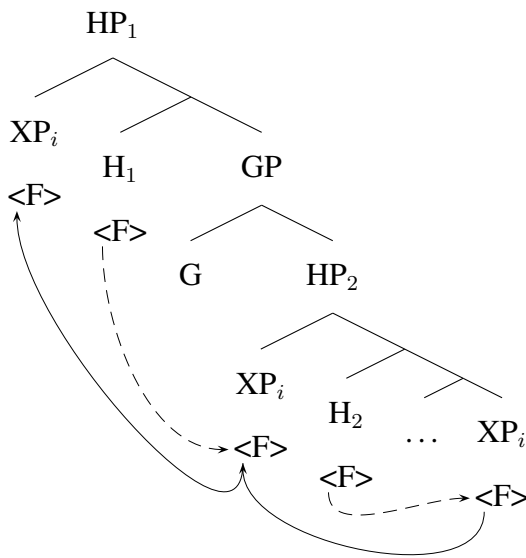
While we follow Abels' approach in assuming that attraction of the *wh*-term to the intermediate Spec,CP alleviates intervention, we also differ with Abels in an important respect. For Abels, the features on C are special in the sense that they have a default value that frees them from an obligatory checking requirement. Other functional heads lack such special features. For instance (finite) T, for him, has a case feature that must be checked; otherwise ungrammaticality arises, which derives T's EPP property. In other words, there must be a universal alignment between features with a default value that do not have to be checked and functional heads that bear these features, like C. These heads, on Abels approach, are phase heads, while heads whose features that lack a default value and do need to be checked are not phase heads.

Here we differentiate. What we argue in this article is that it is not the case that certain features or heads are special to the exclusion of others. Rather, the mechanism that triggers obligatory successive cyclic movement is equally applicable to traditional phase heads and traditional non-phase heads. The empirical prediction of minimality-based locality is that obligatory successive cyclicity can arise for *any* functional head in a derivation. That is, first, (13) is always ungrammatical, irrespective of what head H is. Second, without additional triggers of ungrammaticality, (14) should be fine, even if XP, when moving from embedded Spec,HP to matrix Spec,HP, does not land in an intermediate Spec,CP or any other Spec,GP where G is what is canonically assumed to be a phase head.

(13) * $[_{HP} XP_i H [_{HP} H XP_i]]$



(14) [_{HP} XP_i H [_{GP} G [_{HP} XP_i H XP_i]]]



In the next subsection, we begin to make the predictions of this proposal more concrete.

2.2 Minimality vs. Phasality: Assessing the Predictions

As we've now seen, the main evidence for phases—obligatory successive cyclic movement through the phase edge—is in line with the predictions of both phase-based and minimality-based locality. On a phase-based approach, successive cyclic movement is required in cross-clausal movement to allow the moving element to escape the impenetrable complement of the phase head. On a minimality-based approach, it arises as a result of agreement between an intervening head that


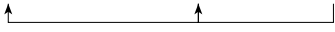
bears shared features and the moving element, resulting in movement to the specifier of the intervening head. How, then, can we differentiate between the two approaches to locality?

The phase-based approach to locality identifies specific heads that will always induce opacity effects, both across languages and for all processes within a language. It affords one mechanism—movement to the phase edge—for establishing dependencies across a phase head. In the case of CP, then, we expect movement to Spec,CP for all cross-clausal dependencies. When the lower clause does not involve a CP phase, we expect movement directly from the base position into the higher clause to be possible, without successive cyclicity. We might also expect it to be impossible for multiple, distinct dependencies to cross a single clause in a language with a single Spec,CP: only one element could ever use that position as a landing site to escape the phase (unless there is independent evidence that the phase edge has multiple specifiers).

A minimality-based approach to locality predicts more possibilities for variation in locality effects within and across languages. Rather than designating specific heads as having special status as phases, the minimality-based approach predicts that locality effects will be relativized to specific features. That is, a phrase like CP might induce locality effects for one type of dependency but not for another. And similarly, another type of phrase might also induce locality effects for a particular dependency if the phrase head bears the relevant feature. We therefore expect to find different barriers for different dependencies within a language. Because, under this approach, locality effects are linked to feature distributions, and are not intrinsic properties of certain heads, we might also expect locality effects associated with a particular head to vary across languages, to the extent that the features associated with a particular head can vary cross-linguistically. Finally, while a phase-based approach depends on movement to the phase edge (successive cyclicity) as the sole means of establishing phase-crossing dependencies, a minimality-based approach could potentially harness other mechanisms for alleviating intervention effects, as we will discuss in the next section.

In the case of A-bar movement and CPs, as we have discussed in the previous sections, we

indeed seem to find the type of uniformity that Phase Theory predicts: rigid successive cyclicity across languages, using only the available specifier(s) of CP.

- (15) a. $*[_{CP} XP_i C \dots [_{CP} C \dots XP_i \dots]]$

 b. $[_{CP} XP_i C \dots [_{CP} XP_i C \dots XP_i \dots]]$


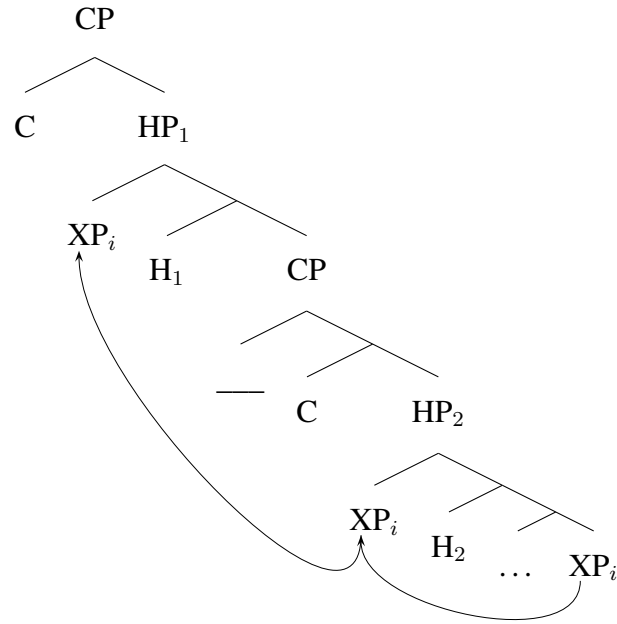
However, it is far from clear that C must be special in this sense. While indeed every instance of cross-clausal A-bar movement into some Spec,CP requires an intermediate landing site, it is less clear that this uniformity in the CP/A-bar domain applies to other CP-crossing dependencies—or that obligatory successive cyclic movement is something that is restricted to heads like C only. In this paper, we argue that (15a)-(15b) are actually special instances of (13) and (14) from the previous section, repeated in simplified form below:

- (16) $*[_{HP} XP_i H \dots [_{HP} H \dots XP_i \dots]]$

- (17) $[_{HP} XP_i H \dots [_{HP} XP_i H \dots XP_i \dots]]$

In order to evaluate the validity of (16)-(17), of which (15a)-(15b) are then instances, as the sole source of successive cyclic movement (and other locality effects), (16)-(17) first need to be verified for movement into Spec,HP where H crucially is not assumed to be phase head. Moreover, to show that successive cyclicity in CP is purely due to Relativized Minimality, and not special phasal status, it also needs to be shown that when the features of C are not implicated in long-distance movement, movement to the higher clause does not necessitate an intermediate landing site in an embedded CP, as schematized in (18):

- (18) $[_{CP} [_{HP} XP_i H \dots [_{CP} \dots [_{HP} XP_i H \dots XP_i \dots]]]]$



Let us discuss each in turn. Baltin (1995) has shown that subjects in infinitival clauses do not move into embedded Spec,TP unless they raise into matrix Spec,TP, as shown in (19)⁵, where we take floating quantifiers to diagnose the position of (copies of) embedded subjects:

- (19) a. The students hoped [_{TP} {*all} to {all} win the race.]
 b. The students seemed [_{TP} {all} to {all} win the race.]

This shows that non-finite T does not necessarily attract the subject to its specifier (otherwise higher *all* should be fine in (19a)), pace Chomsky (2008). But if embedded T does not require subject movement into Spec,TP, (19b) must involve an instance of successive cyclic movement of the subject to the specifier to matrix T of the type in (17), where H is T and XP is the subject.

While the obligatory successive cyclic movement in (18) is unexpected under basic Phase Theory, it could be argued to follow from Phase Inheritance (e.g. Richards, 2008; Chomsky, 2008). Upon deletion of C in (19b), T could be said to take over the phasal properties of C and therefore require successive cyclic movement through Spec,TP (following ideas in Chomsky (2015)). However, Phase Inheritance is restricted to those cases where C must be empty. This does not always

apply to all cases where (17) applies, though. For instance, we can also find instances of the configuration in (18), where a long-distance process bypasses Spec,CP, as well. Here, C is not deleted. Now, strikingly, in Brazilian Portuguese, CPs don't block A-movement, a phenomenon known as hyperraising (see e.g. Nunes 2008 and Ferreira 2009 on Brazilian Portuguese; the large literature on raising out of finite clauses dates back at least to Rivero 1987, 1989). In fact, as Kobayashi (2020) shows, a CP that launches hyperraising does not bleed *wh*-movement (20).

- (20) [Quais livros]₁ elas₂ parec-em [que t₁ ler-am t₂]?
Which books they seem-PL that read-PL
'Which books do they seem to have read?' (Kobayashi, 2020, (54))

The cooccurrence of cross-clausal A- and A-bar dependencies is unexpected under a CP-phasality approach (or a Phase Inheritance approach): the only way out would be through embedded Spec,CP, so the raised subject and the *wh*-term should compete for the landing site.⁶ On the account presented here, this cooccurrence follows straightforwardly: each movement is triggered by different features and embedded Spec,CP is not implicated in long-distance A-movement (as argued by, for example, Zeller, 2006; Halpert, 2019; Lee and Yip, 2022, for other instances of hyperraising). What this already suggests is that it is not so much hyperraising that is in need of an explanation, but rather the absence of it. What would forbid similar constructions like (20) in English?

As is becoming evident, the best places to test the predictions of phase-based vs. minimality-based locality are outside the domain of A-bar movement and CPs. If Abels (2003) is correct that the featural properties of CPs uniformly cause them to intervene in A-bar processes, it is indeed difficult to distinguish the approaches by looking at A-bar facts alone. In the next sections, we will look more closely at A-dependencies across languages to show that, not only do we find other evidence that the predictions of CP phasality are not met, but that the possibility space afforded by Relativized Minimality is instantiated in the patterns we see for cross-clausal A-dependencies across languages.

3 Raising as a Testing Ground

As we saw in the previous section, cross-clausal A-movement is a useful place to investigate the predictions for a Relativized Minimality approach to locality. Indeed, hyperraising in particular poses a challenge to standard Phase Theory: if CP is a phase, movement from Spec,TP to Spec,TP across a CP boundary should be impossible. If movement out of the embedded Spec,TP crosses the CP boundary, Phase Theory would predict that it must pass through the phase edge. As (20) illustrated for Brazilian Portuguese, and as we will see in this section, this prediction is not always borne out. On the other hand, if all phase effects can reduce to Relativized Minimality, as we argue here, we face a different puzzle posed by raising: what prevents raising out of CP in languages like English? The prediction of minimality-based locality is that raising is blocked only when the embedded clause bears the feature that is implicated in raising, regardless of whether the clause is a finite CP. In this section, we'll first map out the predictions of minimality-based locality for long-distance A-movement more precisely and then show that these predictions are instantiated by raising patterns across languages.

3.1 Sketching the Possibility Space

The previous section focused on CPs as barriers in cases of long-distance A-bar movement; as discussed, we propose, following Abels (2003), that these are instances where an embedded C head intervenes for a higher C probe, rather than evidence for an absolute CP phase. For A-movement, the picture will be somewhat different. Here, the probe triggering the movement to the matrix clause is (at least in most raising-to-subject cases) T, not C. In order to understand and evaluate the predictions of minimality-based locality, we first need to understand which feature(s) are involved when a T probe triggers A-movement. While many approaches to A-movement assume that case is the relevant feature, we here follow van Urk (2015) in taking phi-features to be the trigger for A-dependencies (see also Sheehan and van der Wal, 2018; Halpert, 2019; Fong, 2019).⁷ The basic

prediction, then, is that clauses (of any type) will be barriers for A-movement when the clause (head) bears features that intervene with a phi-probe.

The predictions of minimality-based locality, as noted in the previous section, must be evaluated on a phrase-by-phrase (and not phase-by-phase) basis. For each embedded clause type in a language, we must determine whether we expect it to intervene for a higher phi-probe. Intervention alone will yield a pattern in which the intervening phrase is completely opaque for A-movement. Once a category's status as an intervener is determined, though, we still must look closely at other syntactic factors. We know from other cases of Relativized Minimality and intervention that there are ways for a probe to target a non-local element. In particular, we might expect two additional patterns to be attested, each of which could yield raising. Successive cyclic movement, as we've already seen, can alleviate Relativized Minimality; here, we'd expect the embedded subject to exit the intervening clause, whatever it is, via its edge. In addition to successive cyclic movement, we might expect to find some sort of persistent probing mechanism that allows a head to continue to probe past the most local phi-bearer in search of some more specific (sub)-feature (e.g. Béjar and Rezac, 2009; Deal, 2015, a.o.).⁸

A minimality-based approach to locality, then, predicts that categories that block A-movement should uniformly show evidence for phi-intervention across languages, while instances of A-movement across a category may be heterogeneous, even within a language: the long distance dependency may arise from a lack of intervention, from movement via the edge of the intervening category, or from a persistent probe configuration. For example, this approach affords three possible pathways to hyperraising out of embedded CP, and one pathway to opaque CPs:

(21) **Hyperraising typology predicted by Relativized Minimality**

- a. **CP is not a phi-intervener:** hyperraising available *Greek*
- b. **CP is a phi-intervener:**
 - i. **No mitigation:** no hyperraising *English, Makhuwa, Greek*⁹

- ii. **successive cyclic Movement:** hyperraising available *Mongolian, Japanese*
- iii. **Persistent probing:** hyperraising available *Zulu, Luyia, (Cantonese, Vietnamese)*

Of the possible patterns above, only two are predicted by phase-based locality: (21b.i) and (21b.ii). The other two patterns involve movement that bypasses Spec,CP, giving us a way to tease apart the predictions of phases and minimality.

Beyond CPs, this same set of possibilities in (21) will apply to any embedded clause selected by a raising predicate. More concretely, we might expect to see phi-bearing TPs that act as interveners to yield opacity; that require successive cyclic movement for raising; or that require some sort of persistent probing. Again, the predictions for phase-based minimality are rather different: embedded TP should always be transparent for A-movement or could yield opacity (or require a precise mitigation path) if it bears phi-features.

In the previous section, we saw some initial evidence that the predictions of the phase-based approach are not met for either CPs or TPs. Example (20) showed that movement out of embedded CP can bypass Spec,CP in Brazilian Portuguese in hyperraising;¹⁰ (19) showed that English requires successive cyclic movement through Spec,TP in raising. In the remainder of this section, we show that the range of patterns predicted by Relativized Minimality, as sketched in (21) are in fact attested in the raising profiles of natural languages.

3.2 Basic Cases: Establishing Whether CP Intervenes

The basic prediction of minimality-based locality account is that A-movement will only be blocked when a relevant feature intervenes between the T probe and the embedded subject. As discussed in the previous subsection, we here focus on [phi] as a common feature driving these configurations. To the extent that CP appears to be a barrier for A-movement in languages, we therefore expect to find evidence for active (i.e. interpretable) phi-features associated with C (or some element that accompanies CP) in those languages; in the absence of such phi-features on C, we expect the

hyperraising pattern of cross-clausal A-movement.

To investigate this basic prediction, we'll first look at Greek. Iatridou and Embick (1997) show that in Greek, and some other *pro*-drop languages, a CP or IP clause cannot be the antecedent for *pro*.¹¹ They argue that this ungrammaticality is because *pro* must be licensed by phi-features (person, number, and gender) and Greek clauses lack these features. Minimality-based locality would therefore predict A-movement to be available out of finite embedded clauses, which is indeed what we find with finite subjunctive *na*-clauses:

- (22) a. Ta pedhia arxisan na trexoun
the children.NOM started.3PL SBJV run.3PL
'The children started to run.' (Alexiadou and Anagnostopoulou, 1999, (11))
- b. Ta pedhia dhen tis fenonte na meletun
the children.NOM not cl-GEN seem.3PL SBJV study.3PL
'The children don't seem to her to study.' (Anagnostopoulou, 2003, (50b))

The embedded clauses in (22a) and (22b) are headed by subjunctive marker *na* and the embedded verbs agree with the raised subject. [The verb in a *na*-clause is fully inflected for phi-features of the embedded subject; in some contexts, *na*-clauses contain overt subjects with nominative case:](#)

- (23) o Janis theli na figi i Maria
John.NOM wants SBJV leave.3SG Mary.NOM
'John wants Mary to leave.' (Alexiadou and Anagnostopoulou, 1999, (28c))

[Alexiadou and Anagnostopoulou \(1999\) argue for a phase-based account of this pattern, proposing that *na*-clauses in raising contexts are defective and not phasal, lacking semantic tense and therefore unable to assign case to the embedded subject, despite the presence of subject agreement. Other *na*-clauses, like the one in \(23\) are assumed to be phasal and case-assigning, if semantic tense is present. The lack of case on this account is linked to the non-phasal nature of the embedded subjunctive CP. On our account, no extra assumptions are needed to distinguish between](#)

raising and non-raising *na* clauses;¹² their lack of phi-features allows a phi-probe on matrix T to find the embedded subject.

In English, by contrast, as Iatridou and Embick (1997) discuss, finite CPs have the ability to control number agreement on T: building on McCloskey (1991), who demonstrates number agreement for conjoined propositions, they propose that individuated CPs can control subject agreement:

(24) That Susan married Tom and that she took up scuba diving...

a. bother me equally.

b. independently convince me that she has lost her mind.

(Iatridou and Embick, 1997, (39))

The basic prediction of minimality, then, is that embedded CPs in English will intervene for the phi-probe in the matrix clause, blocking raising out of finite CP, as we see in (25) below.¹³

(25) *The children don't seem that t_i study.

The basic contrast between the Greek-type pattern and the English-type pattern above, then, is reduced to differences in the distribution of phi-features on embedded clauses. Importantly, though, we have focused here only on subjunctive *na*-clauses in Greek; as Petersen and Terzi (2014) note, Greek does have a surface-similar construction with *fenete* 'seem' taking indicative *oti*-clause complements. They show that unlike *na*-clauses, these do not show evidence of A-movement; instead, they argue that involves topic-fronting A-bar movement.¹⁴ While a full account of these patterns is beyond the scope of this paper, we believe that the opacity of Greek indicative clauses might arise from established structural and featural differences between *na*-clauses and *oti/pu*-clauses. A body of recent work argues that *oti* and *pu* clauses have more structure than *na*-clauses, and in particular, that these larger clauses have direct links to nominal structure/properties (e.g. Baunaz, 2015; Roussou, 2020; Faure, 2023). Given these differences, we suggest that perhaps only *na*-clauses are true non-interveners for a higher probe; if *oti/pu*-clauses do not have full phi-features as Iatridou and Embick (1997) suggest (or perhaps simply have a [D] feature, as we will

discuss for Uyghur below), the resulting configuration might be one of defective intervention, akin to what we argue for with all English CPs.¹⁵

To return to the basic contrast, we've argued that CP transparency for *na*-clauses correlates with a lack of phi-features on the clause, while opacity for *that*-clauses correlates with the presence of phi-features. In the next subsection we will consider the differing predictions of phase-based and minimality-based locality in the context of other types of embedded clauses that are typically not assumed to be phasal.

3.3 Not Just CP: Other Raising Blockers

The predictions of Phase Theory are centered around the special status of CP as a phase head; CP should be uniformly opaque across languages for all cross-clausal dependencies, while other types of embedded clauses should be uniformly transparent. By contrast, there is nothing special about CP on a minimality-based approach; *any* phrase with phi-features should intervene between a matrix phi-probe and embedded subject, regardless of its category. When we look across languages, we indeed find evidence of opacity of just this type.

While many Bantu languages have been shown to have hyperraising (e.g. Ura, 1994; Carstens and Diercks, 2013; Carstens, 2011; Diercks, 2012; Halpert, 2019, see also discussion in §3.4 below), we also find Bantu languages like Makhuwa, which lacks raising altogether (van der Wal, 2015). In this language, in which finite verbs may agree with either post- or pre-verbal subjects, infinitives lack the ability to agree with their own subjects and instead bear an infinitive marker that has noun class 15 phi-features and can control agreement on T:¹⁶

- (26) a. O-kí-tshivélá [o-várá ehópa]
15SM-1SG.OM-please 15-grab 9-fish
'I like fishing/catching fish.'
- b. [O-vár' ehópa] o-kí-tshivélá
15-grab 9-fish 15SM-1SG.OM-please
'I like fishing/catching fish.' (Kruijdsijk et al., 2022, (26))

Overt subjects of infinitives in Makhuwa must be expressed via a genitive or connective construction, following the nonfinite predicate, rather than as a plain DP in preverbal position:

- (27) a. O-cáwá w-áwé Folóra o-ki-tsívéla
 15-run 15-POSS.1 1.Florá 15SM-1SG.OM-please
 ‘Flora’s (way of) running I like.’
- b. O-c’awá w-a Folóra ti w-oóréera
 15-run 15-CONN 1.Florá COP 15-good
 ‘Flora’s running is good.’ (van der Wal, 2015, (58),fn.22, p.124)

While infinitive clauses are distinct from finite clauses in a number of ways that suggest they are smaller than finite clauses, including the absence of subject agreement/licensing, absence of high negation and other limits on verbal inflection (see van der Wal, 2009), and the lack of complementizers, they share one striking property: both the infinitive prefix and the finite complementizer *wiira* contain the *o-/w-* morphology characteristic of noun class 15 phi-features. And indeed, when the clausal argument is a finite clause headed by the complementizer *wiira*, we find the same class 15 subject agreement on the matrix verb that appears with infinitival subjects:

- (28) O-ki-tsivela wiira Peeturu a-var-e nteko
 15SM-1SG.OM-please COMP 1.Pedro 1SM-grab-SBJV 3.work
 ‘I like it that Pedro works.’ (van der Wal, 2015, (46b))

Halpert (2019) points out that the phi-properties of Makhuwa clauses would cause both infinitive and finite clauses to satisfy a phi-probe on matrix T, intervening between T and the embedded subject, leading to the absence of raising constructions that van der Wal (2015) describes.¹⁷

If phi-bearing infinitives can block raising in a language like Makhuwa, what do we expect for nonfinite TPs in English? As with finite CPs, these clauses can control number agreement when conjoined:

- (29) [To grow your own food] and [to cook it] *is/are equally satisfying.

Here we might wonder why English permits raising at all, instead of showing the Makhuwa-type non-raising pattern for both CPs and nonfinite TPs. However, as we saw in (19b) above, repeated below, English shows evidence that raised subjects pass through Spec,TP in the embedded clause:

(30) The students seemed [_{TP} *all* to win the race.]

Recall that the floated quantifier in Spec,TP of the embedded clause was unexpected on a Phase Theory account of raising, especially since subjects of embedded control infinitives, where raising does not occur, show no evidence of moving to Spec,TP. On a minimality-based account, though, this type of successive cyclic movement out of TP is exactly what we expect to find if TP is a phi-intervener. By contrast, the subjects of Makhuwa infinitives in (27) are not located at the edge of TP, so we might expect them to be truly trapped inside the embedded TP in raising environments.

A closer look at TPs, then, shows not only that TP can be opaque for A-movement when it bears phi-features, as in Makhuwa, but also that in languages like English, successive cyclic movement might provide an escape hatch from TP for raising, just as it does in instances of A-bar movement out of CP. In the next section, we will examine strategies for mitigating intervention for A-movement at the CP level.

3.4 How to Get Around Clausal Intervention

In Makhuwa, we saw that both TPs and CPs are opaque for A-movement because both bear phi-features and can satisfy the matrix T probe. Zulu, another Bantu language, has similar phi-properties for TPs and CPs,¹⁸ but a different raising profile. As Halpert (2019) shows, Zulu blocks raising out of nonfinite TPs, but permits it out of finite CPs:

- (31) a. **uZinhle_i** **u-bonakala** [ukuthi *t_i* **u-zo-xova** ujeqe]
 AUG.1Zinhle_i 1SM-seem that *t_i* 1SM-FUT-make AUG.1steam.bread
- b. * **uZinhle_i** **u-bonakala** [*t_i* uku-(zo-)xova ujeqe]
 AUG.1Zinhle_i 1SM-seem *t_i* INF-(FUT-)make AUG.1steamed.bread

‘It seems that Zinhle will make steamed bread.’ (Halpert, 2019, (3b-c))

Halpert (2019) argues that the difference between Makhuwa and Zulu stems from another difference between the languages. In Makhuwa, movement of agreeing elements to Spec,TP is generally optional, and DPs, TPs, and CPs can all control agreement in postverbal position. Zulu, by contrast, always requires agreeing DPs to move to Spec,TP. Nonfinite TPs also show this behavior, moving to Spec,TP when they control subject agreement, as in (32). Finite CPs, which also have phi-features and can control agreement in various contexts in Zulu, cannot occupy Spec,TP, as (33) shows.

- (32) [uku-(zo)-fika k-ubusika] ku-ya-bonakala
AUG.17-(FUT)-arrive 17ASSOC-AUG.14winter 17SM-YA-seem
‘Winter’s arrival is evident.’/‘We can tell that winter is coming.’
(Halpert, 2019, (52a))

- (33) *[ukuthi w-a-thatha umhlala phansi] **ku-ya-ngi-mangaza**
that 1SM-PST-take AUG.1sit down 17SM-YA-1SG.OM-surprise
intended: ‘That he retired surprises me.’ (Halpert, 2019, (47))

Empirically then, Zulu shows independent evidence that CPs can control agreement but cannot satisfy the EPP property of T.¹⁹ Based on these facts, Halpert (2019) proposes that in Zulu raising configurations, while the embedded CP can act as a phi-goal for matrix T, it cannot satisfy the EPP feature, so T will continue to probe. This *continued probing due to an unsatisfied probe* is what causes T to find the embedded subject.²⁰ In Makhuwa, *by contrast, there is descriptively no EPP effect; without an unsatisfied probe to drive* further probing, embedded TPs and CPs will always block A-movement.

As we saw in the previous section, English shows evidence of successive cyclic A-movement through the TP edge. On a minimality-based approach to raising, we might also expect movement through CP edge to facilitate raising in cases where CP acts as an intervener for the matrix probe. There are in fact a number of analyses of raising-to-object/ECM across a wide variety of languages

that take exactly this approach, arguing that the finite CP-crossing A-dependency takes place via movement to Spec,CP (e.g. Zyman, 2017; Fong, 2019; Wurmbrand, 2019).

In Mongolian, for example, Fong (2019) argues that hyperraising to object, which correlates with the presence of accusative case on the thematic subject of the embedded clause, proceeds via the edge of Spec,CP. Fong first looks at the differences between nominative- and accusative-marked embedded subjects, showing that the accusative-marked embedded subjects are in a structurally higher position within the embedded CP than the nominative-marked subjects in Spec,TP. She concludes based on evidence from adverb placement that the position of these accusative-marked subjects must be Spec,CP, where they are visible to material in the higher clause for both case and binding dependencies. While subjects that remain in the embedded clause may be either nominative or accusative (though with corresponding consequences for binding), when A-movement out of CP occurs, accusative is obligatory. For example, when the embedded subject appears to the left of a matrix adverb, as in (34b), it must be accusative-marked.

- (34) a. Bat chang-aar **nokhoi (-g)** gaikhal-tai gej khel-sen
Bat loud-INSTR dog (-ACC) wonder-with COMP say-PST
- b. Bat **nokhoi *(-g)** chang-aar gaikhal-tai gej khel-sen
Bat dog *(-ACC) loud-INSTR wonder-with COMP say-PST
'Bat said loudly that dogs are wonderful.' (Fong, 2019, (5))

Fong (2019) presents a variety of diagnostics to demonstrate that the accusative-marked element in the matrix clause has undergone A-movement; combining these with her observations about the position of accusative-marked embedded subjects, she concludes that the path for hyper-raising out of CP is via Spec,CP.

Zyman (2017), Fong (2019), and Wurmbrand (2019) all demonstrate that when Spec,CP functions as a launch site for further A-movement, it shows other evidence of being an A-position; they build on van Urk (2015) to argue that the presence of phi-features on C can yield a mixed A/A-bar position. In all of these cases, pure A-bar movement seems to be incapable of feeding raising.

Wurmbrand (2019) specifically argues that movement to CP edge *must* be driven by an A-feature in order to permit further A-dependencies, proposing an “Improper A-after-A’ constraint”. As Wurmbrand notes, there appear to be a mix of other semantic and pragmatic factors that contribute to the availability of the mixed CP edge position that can launch further A-dependencies; she suggests that the variation in the availability of this position and the particular circumstances in which it can attract a DP yield the crosslinguistic variation in (hyper)raising patterns. For Wurmbrand, movement through the CP edge is necessary to escape a phase; on the view we propose, it is simply one strategy for establishing a cross-clausal A-dependency.²¹

Interestingly, while cases of hyperraising-to-object/ECM via the CP edge are well attested, we are not aware of languages in which hyperraising-to-subject is generally available that clearly instantiate this strategy.²² English, however, may be a language that permits this type of movement, in exactly the type of constrained way that Wurmbrand (2019) predicts. Danckaert and Haegeman (2017) describe cases of *wh*-raising that are grammatical for some speakers of English, where it appears that an embedded *wh*-subject can undergo movement into the matrix clause and control agreement in both clauses:

- (35) any quotes which_i were felt t_i were relevant to the process (Danckaert and Haegeman, 2017, (6))

These cases are highly restricted, even for those English speakers who permit this possibility; *wh*-raising can only occur with embedded subjects and cannot cross more than one clause boundary. Based on these restrictions, Danckaert and Haegeman (2017) conclude that hyperraising is not parasitic on standard A-bar movement of a *wh*-phrase to Spec,CP. *Instead, they analyze these cases as involving phi-driven movement through a clause-edge (dubbed ϕ inP by them), a mixed A/A-bar position that is only available in cases of subject *wh*-extraction. They further argue that for some speakers of English, this specialized position is also available in the matrix clause, allowing the *wh*-phrase to A-move and agree in both clauses. The derivation that Danckaert and Haegeman*

(2017) propose is a straightforward possibility in our system: movement to the embedded ϕ inP can feed subsequent agreement and movement in the matrix clause. The crucial ingredient is the presence of a composite A/A-bar probe that they argue for in subject *wh*-extraction only.

Here we have seen that the two expected strategies for circumventing intervention—continued probing to satisfy some feature of the matrix T probe and successive cyclic movement via the edge of the embedded clause—have both been argued to occur in cases of A-movement across CP. While these analyses are typically couched in terms of phases, we argue instead that they should be understood as means of alleviating intervention effects. And in all of the cases we have considered in this section, a phi-probe is implicated in driving the long-distance A-dependency. To the extent that A-movement is simply the outcome of phi-driven movement, this is perhaps expected (e.g. Obata and Epstein, 2011; van Urk, 2015). In the next section, though, we'll consider the degree to which other features might be implicated in the types of cross-clausal movement we have been discussing in this section.

3.5 Relativized to What?

As Wurmbrand (2019) notes in her discussion of hyperraising, not only is CP-crossing hyperraising typically optional in the languages that permit it, but additional semantic or pragmatic factors also seem to play a role in these configurations. If these factors are featurally encoded, we might expect them to play a role in minimality-driven derivations as well. Here we will consider the way in which other features might contribute to the raising landscape. **It is important to note that the approach we advocate does not entail that any particular feature or combination of features will yield hyperraising; rather, once the properties of particular probes are independently established in a given language, we can predict the circumstances under which CP-intervention can be alleviated. A composite probe will potentially afford more possibilities for alleviating intervention effects, since one feature of the probe might not be satisfied by, say, a CP with intervening phi-features.**

The previous subsection already illustrated one case where the matrix probe is not simply

relativized to phi: in Zulu, Halpert (2019) argues that the phi-intervention induced by an embedded clause can be mitigated by the EPP. We might think of this EPP-type effect as a [D] probe on T, which can be satisfied by DPs and (nominalized) nonfinite TPs, but not CPs, even though all three bear phi.

The possibility that a [D] probe might induce A-movement, rather than a [phi] feature itself, has also been suggested for Uyghur, for which Asarina (2011) argues that cross-clausal A-movement is purely driven by a category-sensitive EPP, with no role for [phi] at all. She demonstrates that in Uyghur, when the complement to a raising predicate is a DP nominalization, the embedded clause is opaque for A-movement and the entire clause raises. By contrast, if the embedded clause is an NP-sized nominalization, raising of the embedded subject occurs. Asarina (2011) shows that unlike DPs, NPs cannot satisfy the EPP in Uyghur; a minimality-driven derivation, relativized simply to [D], can capture this pattern. In this case, we do not see intervention alleviation, and CPs are not involved, but it helps to establish the role that [D] may play, separate from [phi].

Lee and Yip (2024) also identify a [D] feature as the driving force for cross-clausal A-movement in cases of hyperraising-to-subject in Cantonese and Vietnamese. They show that hyperraising in these languages is possible out of the complements of certain attitude verbs (36a), but not others (36b), as illustrated for Cantonese below:

- (36) a. Coeng jyu gamgok/tengman waa m-wui ting.
CL rain feel.like/hear COMP not-will stop
'It is felt/heard that the rain will not stop.'
- b. *Coeng jyu gamgok-dou/zidou waa m-wui ting.
CL rain feel-ACCOMP/know COMP not-will stop
Int.: 'It can be felt/is known that the rain will not stop.' (Lee and Yip, 2024, (1a),(2a))

Lee and Yip (2024) observe that in Cantonese, Vietnamese, and many other hyperraising languages, the predicates that permit hyperraising appear to be ones that encode indirect evidentiality. They show on a variety of measures that these clauses that launch hyperraising are at least as big as finite CP, and that the difference between hyperraising and non-hyperraising configurations

lies with the selecting verb, not the structure of the embedded clause. They propose a phase deactivation approach, where a matrix probe bears both an indirect evidence feature [EV] and an EPP/A-movement feature [D]. The embedded clause is goal for [EV], but the probe continues to search for a [D]-satisfying goal, causing it to raise the embedded subject. In the absence of [EV] agreement, they argue, CPs are opaque. On their account, the absence of hyperraising in languages like English amounts to the absence of an [EV] probe to deactivate the phase.

To what extent is this characterization, where [EV] agreement with the CP can allow dependencies across the CP, amenable to the minimality-driven derivations we are advocating for here? For Lee and Yip (2024), the absence of an [EV] probe means that CPs will remain impenetrable phases; our account does not privilege CP phases in the same way, instead predicting that the absence of an intervening feature on C ought to facilitate hyperraising. In other words, a minimality-driven approach must explain why CPs ever block raising in these languages. One possible answer comes from hyperraising patterns in Luyia (Bantu) languages that Lee and Yip (2024) discuss. While Lee and Yip (2024) do not consider the role of [phi] in Cantonese or Vietnamese, where we see neither morphological agreement nor case, they note that in the cases of hyperraising in Luyia (Bantu) languages discussed by Diercks et al. (2022), matrix phi-agreement is implicated. In particular, as Diercks et al. (2022) show, matrix agreement shows striking optionality in hyperraising configurations: it can track both direct and indirect evidence (with both raised and in situ embedded subjects), as well as the raised subject itself. In Tiriki, for example, Diercks et al. (2022) demonstrate that A-movement of an embedded subject driven by the raising predicate *-fwana* permits 3 possible subject agreement patterns in the main clause: class agreement that matches the raised subject (class 7 here) and two different types of so-called “expletive” agreement. Class 9 agreement *i-* can yield direct evidential meaning while class 6 expletive *ka-* yields an indirect evidential meaning:

- (37) shivala **i-/ka-/shi-**fwaan-a khuli shi-hamb-i muriro.
 7-world 9SM-/6SM-7SM-seem-FV that 7SM-be.on.fire-FV 3-fire

Lit. “The world seems to be on fire.”

Id. “Things seem to be going badly.” (Diercks et al., 2022, (109b)/(110))

Lee and Yip (2024) take the availability of evidence agreement with class 9 and 6 in examples like (37) as support of [EV]-driven raising in these languages, where so-called expletive agreement in the main clause reflects properties of [EV] features on the embedded clause. We highlight the fact that all of these possibilities are instantiated by phi-agreement, which we take to indicate that [EV], [phi], and [D]/EPP are all probing in tandem here—and that in Luyia languages, as in Zulu and Makhuwa, the embedded CP itself is a phi-goal. On a persistent probing account, one can then say that CP opacity for A-movement arises from phi-intervention on C, while the feature that triggers persistent probing here is [EV]. While we cannot sketch a full minimality-driven account of Cantonese and Vietnamese in this paper, we suggest that opacity effects in the absence of an [EV] probe in the higher clause indicate either the complete absence of any A-movement probe or the presence of an intervening feature phi-feature on C.

3.6 Taking Stock

What does raising teach us about phase-based vs. minimality-based locality? First, we’ve seen cases in which nonfinite TPs show phase-like behavior, requiring successive cyclic movement, as in English, or blocking raising altogether, as in Makhuwa or Zulu. Such behavior is not accounted for by Phase Theory, but would be a predictable consequence of Relativized Minimality if nonfinite TPs are sometimes interveners for the probe that drives raising. Second, we’ve seen that finite CPs themselves are not necessarily opaque for A-movement, as in Greek, which is unexpected on Phase Theory, but predicted if CPs do not bear the feature implicated in raising. Finally, we’ve seen that many languages permit raising out of CPs but show evidence of a complicated, multi-step derivation; this type of pattern arises because CP interveners in A-movement are goals and not themselves probes (unlike in the A-bar cases). We’ve generally seen two types of strategy

for these cases of hyperraising: movement via the CP edge and movement that involves some sort of persistent probing, with multiple steps of agreement driven by the EPP. In all of these cases, A-movement/phi-agreement is implicated in every step, even movement to CP edge; in many (perhaps ultimately all) of these cases, some additional feature, like [EV] or [wh] seems to act in tandem with [phi]. While most previous approaches have assumed that these multi-step hyperraising derivations occur as a means of neutralizing the CP phase, we have suggested here that they can instead be understood as a means of mitigating intervention of the CP for [phi] (or another relevant feature), as expected under featural Relativized Minimality (cf. Rizzi, 2009). We conclude that the full raising picture, where the same sorts of effects can be found with TP-sized (and DP-sized) clauses, indicates that the minimality-based approach has better empirical coverage overall.

4 Beyond Movement: Minimality-based Locality in Long-Distance Agreement

So far, we have shown that phasality/PIC effects concerning both A and A-bar movement can be captured purely in terms of Relativized Minimality (or Attract Closest). However, the PIC has not only been postulated to capture obligatory successive cyclic movement, but also to block any other syntactic dependency that crosses a phase head. In this section, we consider the extent to which the minimality-based approach can deal with the locality of those syntactic dependencies that do not involve movement.

Here, we focus on Long-Distance Agreement (LDA). Various languages in the literature have been reported to exhibit agreement where a goal in a lower (finite) clause agrees with a probe in a higher (finite) clause. Below we provide examples in (38) from Tsez (Polinsky and Potsdam, 2001) and in (39) from Innu-aimûn (Branigan and Mackenzie, 2002)

- (38) a. Enir [užā magalu b-āc'-ru-hi] r-iyxo.
 mother boy bread.III.ABS III-eat-PSTPRT-NMLZ] IV-know
 'The mother knows that the boy ate the bread.'
- b. Enir [užā magalu b-āc'-ru-hi] b-iyxo.
 mother boy bread.III.ABS III-eat-PSTPRT-NMLZ] III-know
 'The mother knows that the bread, the boy ate.' (Polinsky and Potsdam, 2001, (56))
- (39) a. Ni-tshissenit-en [Pûn kâ-mûpisht-âshk].
 I-know-TI [Paul PRT-visited-2/INV]
 'I know that Paul visited you.'
- b. Ni-tshissenit-âu [Pûn kâ-mûpisht-âshk].
 I-know-3 [Paul PRT-visited-2/INV]
 'I know that Paul visited you.' (Branigan and Mackenzie, 2002, (5))

In both cases, the matrix verb optionally agrees with an embedded argument. In Tsez, this is always with an embedded absolutive topic. In Innu-aimûn it can be a topic or a *wh*-phrase. When LDA does not occur, default agreement appears on the matrix probe.

Such examples *prima facie* form a problem for the PIC, but Polinsky and Potsdam (2001) and Branigan and Mackenzie (2002) argue that these cases involve (often covert) movement of the goal from its base position to the edge of the CP. In that case, they no longer pose a problem for the PIC as then the goal is at the phase edge and thus local enough.

At the same time, in order for such an analysis to work, one needs to assume that (i) the relevant goals, can, optionally, undergo covert movement to the clausal edge; and (ii) that this covert movement can feed agreement. This second assumption in particular is problematic, as it is known for other agreement phenomena that covert movement cannot feed them. The following examples from French, where participle agreement must appear when the object goal is in any higher, c-commanding position than the (arguably vP-internal) probe and impossible if it is in a low position, show that here covert movement cannot feed agreement. If covert agreement could feed agreement, (40d) should permit feminine agreement, contrary to fact.²³

is correctly predicted to be ruled out. Under the alternative view, only C/Top can only agree with an absolutive topic. If there is no such topic, (default) agreement with the CP obtains.

If CP is a phase, these facts follow trivially. If the DP agrees with C (or a more specified Top head), as under our proposal, these features percolate to embedded CP and these value the goal under Agree. If the DP does not Agree with C/Top, C/Top would intervene in the Agree relation between matrix v^o and the DP, and long-distance LDA would be ruled out. Also, under Phase Theory, embedded CP can value a higher probe without violating the PIC. Hence, just as we saw with cases of successive cyclic A-bar movement, these LDA effects could be equally well explained by either phase-based or minimality-based locality.

A crucial ingredient for our approach is that C(P) is an intervener for agreement. This, again, is clearly visible in the case of Tsez where a (nominalized) embedded clause triggers noun class IV agreement in absence of a relevant topic. If CPs can control agreement themselves, they should indeed act as interveners. But what about a language in which CPs cannot control phi-agreement in any way and thus do not participate in any phi-dependency relation? In that case, minimality-based, unlike Phase Theory, predicts that CP should not count as an intervener and LDA should be possible without the goal having any active dependency with the clausal edge. If this type of configuration is attested, that would strongly plea in favor of a minimality-based approach and against one in terms of phasality.

Such cases may indeed exist. As we saw, in Tsez LDA is restricted to embedded (absolutive) topics. In Innu-aimûn, it can occur with a topic or a *wh*-phrase, while in Passamaquoddy, the goal of LDA does not have to have a distinguished information structure status at all (Bruening, 2001; Bhatt and Keine, 2017). In fact, Bruening (2001) shows that in Passamaquoddy embedded agreement goals do not have to move to the edge of the CP. However, he argues that the data are still compatible with a view where they covertly raise to the edge of the embedded clause, provided they reconstruct afterwards. It would be hard to assess this claim, as upon reconstruction there is no independent evidence for such covert raising.²⁵

Börjesson and Müller (2020) also show various cases where, depending on the analysis, LDA with elements that do not move to the clausal edge is possible. In these cases, however, it is hard to definitively rule out an Agree relation between the non-moving goal and the head of the embedded clause. Therefore, it is hard to use them as diagnosing languages. But Börjesson and Müller (2020) also present data from the non-Tsezic Nakh-Dahgestanian language Tsakhur, where LDA across two clause boundaries is possible:

- (42) Ičī-s w=uk̄īkin-na [_{CP} jičō-j-s [_{CP} gaba hāʔ-as]
 girl-DAT 3=want.PF-AA sister-OBL-DAT carpet.3 3.do-POT
 XaIr-qi=w=x-es]
 learn-3=become-POT
 ‘The girl wants her sister to learn to make a carpet’. (Börjesson and Müller, 2020, (21),
 citing Kibrik 1999)²⁶

If these embedded arguments are indeed full finite clauses, Tsakhur would then exemplify a language where CPs are not engaged in phi-dependencies, with the result that LDA across clauses, and thus across phase boundaries, is possible (at least, to the extent that these embedded finite clauses are CPs).

Similar examples for Khwarshi have been provided by Khalilova (2007, 2009), as reported in Pyatigorskaya (2019). Here, LDA clearly applies across clause boundaries, given the presence of a complementizer (43a) or embedded *Wh*-term (43b):

- (43) a. dilj b-iyōq’ [iso lj-ullo kec’i b-ez-nu bani-ma]
 1SG.LAT III-know.GNT that.GEN1 IV-strong III-song III-take-MASD shower-IN
 ‘I know about his singing in the shower.’ (Pyatigorskaya, 2019, (13a), citing Khalilova
 2009, p. 367)
- b. Uza-l l/b-iq’-se [ëu-foc zihe b-iti-xx-u]
 boy.OBL-LAT IV/III-know-PRS who.ERG cow(III) III-divide-CAUS-PST.PTCP
 ‘The boy knows who has stolen the cow.’ (Pyatigorskaya, 2019, (14), citing Khalilova
 2007)

Here, the CP boundary is clearly transparent for agreement, which can be captured under Relativized Minimality (if the CPs are not phi-active), but not under a phase-based approach to CPs.

Finally, as we saw in the previous section, the minimality-based approach we advocate for here should apply equally to any phrase that has the relevant features, not just CPs. For A-movement, we found evidence for more generalized minimality in languages like Zulu or Uyghur, where TP- and DP-sized embedded clauses act as barriers for movement. A phase-based approach to LDA predicts that anything smaller than CP should be transparent for agreement; however, as Bešlin (2022) demonstrates, optional LDA is possible in Serbian only at the edge of an embedded finite TP.²⁷ Bešlin establishes that the verb *trebati* ‘need’ takes finite TP complements headed by T *da*. Example (44) shows that when an embedded subject appears at the edge of Spec,TP—here diagnosed by the presence of an *i*-NPI that requires superordinate (and not clause-mate) negation—LDA is possible. When the subject follows T, LDA is not an option.²⁸

- (44) a. Ne bi treba-o [_{TP} i-ko da to uradi.
 NEG AUX.AOR.3SG need-PTCP.MASC.SG i-who DA that do
 ‘No one should do that.’
- b. Ne bi treba-lo [_{TP} da i-ko to uradi.
 NEG AUX.AOR.3SG need-PTCP.NEUT.SG DA i-who that do
 ‘No one should do that.’
- c. *Ne bi treba-o [_{TP} da i-ko to uradi.
 NEG AUX.AOR.3SG need-PTCP.MASC.SG DA i-who that do

(Bešlin, 2022, (26a), (27a-b))

As Bešlin (2022) notes, this pattern is unexpected under standard phase-based locality. As we have seen in other cases, minimality-based locality predicts that the T head here acts as an intervener for LDA if it carries phi-active features itself. Cases like this one can therefore serve as a place to investigate the differing predictions of phase-based and minimality-based approaches.

5 Discussion and Conclusion

In this paper, we have explored the idea that phases can be subsumed into Relativized Minimality: we have argued that the locality effects ascribed to phases can in fact be recast in terms of minimality—and that a minimality-driven approach can provide better empirical coverage for a range of locality effects for which Phase Theory has no ready explanation. While some of the individual phenomena that we have discussed could be accounted for in Phase Theory by associating phase boundaries with the right phrases in an articulated clausal domain or invoking Phase Inheritance in the right environments, we hope to have shown that it becomes difficult to maintain a principled and coherent definition of phasality across languages—and in some cases even across phenomena within a single language.²⁹ Relativized Minimality and phases coexist in many approaches to syntactic dependencies; eliminating phases in favor of minimality alone therefore reduces redundancy in grammar (see e.g. Rizzi, 2009; Torr, 2012, for discussion) and removes the conceptual problems facing phases (e.g. Truswell, 2005; Bešlin, 2024).

Over time, a number of modifications to Phase Theory have been proposed, including the Weak PIC (e.g. Chomsky, 2001), Phase Extension (e.g. den Dikken, 2007), Phase Sliding (e.g. Gallego and Uriagereka, 2007), and Phase Unlocking (e.g. Rackowski and Richards, 2005), among others. These proposals were introduced to better account for the empirical data, which, as we have discussed, demands a degree of flexibility and cross-linguistic variation in any account of locality. At the same time, however, these extensions complicate the original notion of phases and, in some cases, generate tensions or inconsistencies within the theory.

For instance, Phase Unlocking, in its original version (Rackowski and Richards (2005)), deviates from standard Phase Theory in that (i) only phases are elements that can undergo movement; and (ii) that potential goals for movement, i.e. phases, no longer form a barrier if they already agree with some higher probe. However, the footprint of Phase Unlocking gives rise to already straightforwardly follows from Relativized Minimality. If a probes searches for a goal, it stops searching

beyond the highest one. If only phases are potential goals, probing halts at the phase edge. Now, it has been established independently that goals need to have some feature unchecked/unvalued in order to be visible as goals; this goes back to Chomsky's Activity condition (cf. Chomsky (2000)). Hence, if a particular phrase is no longer active, it cannot act as a goal, and therefore as an intervener. The only thing that is phase-specific about the original Phase Unlocking proposal is that it takes only phases to be movable objects. But there is nothing in standard Phase Theory from which this follows. It is an additional assumption that requires the set of phase heads to be extended to at least P- and D-heads (and arguably also T, V and N heads if TPs, VPs and NPs can also move).

The assumption that many phrases are phases is not innocent, though. Recently, it has been argued by Keine and Zeijlstra (2025) that *v*, for instance, should not count as a phase head, or at least that the core evidence provided for it (successive cyclic movement), already follows from standard Relativized Minimality augmented by the assumption that in certain languages C probes for the closest DP goal (Aldridge, 2004, 2008).³⁰ Since those extraction effects have originally been posed as core evidence in favour of vP-phasality (see, for instance van Urk and Richards, 2015), this further removes the necessity of taking vPs to be phasal. Maintaining this hypothesis would actually lead to theoretical redundancy.

In fact, recently, a larger body of work has been put forward that aims, on various grounds, to dismiss with the notion of phasality, at least for certain phase heads. If these proposals—most notably Thivierge (2021), who argues as well that phasality in many cases can be reduced to relative locality, and Bešlin (2025a,b)—are on the right track, the notion of phasehood is something that should not be amended to make it work better empirically, but instead dispensed with in its entirety.

Of course, successive cyclic movement has not been the only kind of evidence provided for phasality. For instance, Lebeaux (1988) proposed a diagnostic for intermediate copies in Spec,CP based on the interaction between binding and reconstruction, something that Fox (1999) has also applied to vP-phasality. Other, similar arguments in favor of phasality (of either CP or vP) are based on parasitic gaps (Nissenbaum, 1998; Legate, 2003). There are two things to say about these

arguments. First of all, what these arguments aim to account for is successive cyclic movement. Our proposal also derives successive cyclic movement, albeit not driven by phasality requirements. In that sense, many of the arguments in favour of phasality that are based on the presence of intermediate copies of moved elements extend to our proposal as well. There is, however, one crucial difference. Under phasality approaches every CP and every vP must act as an (intermediate) landing site for movement, whereas for us that is not always the case. However, even in cases where we predict no obligatory intermediate movement, nothing excludes that for other reasons moved elements can still land in the edge of a CP or vP. As Keine and Zeijlstra (2025) note, these arguments only establish that it is possible for a moved expression to pass through Spec,vP or Spec,CP, not that such movement is obligatory. In that sense, these arguments do not militate against our approach.

Another example where phases may form a domain for syntactic operations concerns morphological case assignment. Baker (2014) argues that morphological case assignment applies at TP/CP level, which would be compatible with CP being phasal, though there could also be many other reasons why domains for case assignment are determined by (finite) tense. As Den Dikken (2023) argues, there are several problems for Baker's proposal; Den Dikken argues that case assignment is better dealt with in terms of both CP and vP phasality, albeit by making a number of non-trivial assumptions, such as the assumption that constituents base-generated at the edge of a phase and spelled out with it (even when phonologically silenced) are ineligible for movement out of the phase. Given these issues, the locality of case assignment cannot provide clear evidence in favor or against (CP or vP) phasality.

As we have tried to show here, minimality-based locality provides a systematic way to capture variation in locality patterns within and across languages: variation can occur both in the distribution of particular features across heads and in the satisfaction conditions for probes. First, locality is always relativized to a particular probe/dependency type, so we can see variation in locality domains for different processes within a language.³¹ Variation in the location of specific features

across languages can yield potentially different locality domains: the successive cyclic movement signature of phases arises in configurations where a phrase containing the goal shares the relevant feature, regardless of phrase type. Finally, variation in the feature combinations on heads and satisfaction conditions of particular features can also impact locality domains: as we've seen for A-movement, intervention can be alleviated in order to satisfy the EPP or some other linked feature without the signature of successive cyclic movement. By examining the feature distribution and satisfaction conditions for particular probes within a language, we can determine a 'locality profile', predicting which heads should induce locality effects for which processes.

The minimality-based approach to locality suggests a different framing for some of the observations and research questions about locality within and across languages than a phase-based approach. We here attempt to sketch out some of the questions and future avenues suggested by the approach we adopt in this paper.

Phase Theory ascribes special status to certain heads: cross-linguistically, C and (some version of) v^o are assumed to be unique in requiring Spell Out of their complements. As we have discussed, widespread crosslinguistic uniformity surrounding these heads is therefore expected on a phase-based approach. A minimality-based approach to locality, by contrast, in principle allows any head to induce locality for any probe, if it bears the same type of feature as the probe. We have shown that some amount of cross-linguistic variation on feature distribution for phi-features is indeed desirable and necessary to reflect the empirical picture.³² Pockets of widespread cross-linguistic uniformity, as we seem to see with A-bar/CP locality, now become areas for further investigation and scrutiny; on this approach, uniformity is telling us something deep about potential cross-linguistic universals in the distribution of features.

In our discussion of A-movement, we argued that a minimality-based approach to locality not only predicts the successive cyclic movement pattern, where the goal moves to the specifier of an intervening head, but also other means of alleviating minimality. In particular, we suggested that the type of persistent probing mechanisms required to capture patterns like omnivorous agreement

can also be found in cases where a clause head intervenes in an A-dependency. The fact that we saw evidence for this type of persistent probing in A-movement but not A-bar movement may suggest another point of variation that should be investigated further: in A-bar cases, following Abels (2003), we assumed that intervening heads are themselves A-bar probes. In A-movement cases, by contrast, at least some of the intervening heads simply seem to be phi-goals, rather than probes. While we predict that intervening probes obligatorily yield successive cyclic movement, intervening goals seem to either yield impenetrability or a long-distance dependency that bypasses the clause edge.

Another question raised by the minimality-based approach to locality concerns the (lack of) feeding relationships that arise between the different derivational steps involved in long-distance dependencies. On this approach, any successive cyclic movement requires hyperactivity: *wh*-goals and phi-goals that move via a clause edge need to be probed for the same feature multiple times in the derivation. In this paper, we assume that such probing is always possible, but an open question remains of whether (and how) goals are ever deactivated for particular features. Another facet of this question concerns the notion of proper movement: one notable aspect of the long-distance A-dependencies that we discussed is that while they can be fed by movement to a CP-edge, pure A-bar movement of this type does not typically seem to feed further A-movement. Wurmbrand (2019) captures this pattern with her “Improper A-after-A’ constraint”, which requires additional assumptions beyond the basics of Relativized Minimality. These questions are not unique to a minimality-driven research program, but to the extent that the patterns show restrictions beyond what is predicted by pure intervention, they are important to investigate.

Finally, our proposal here reduces the notions of locality required in the theory by eliminating phases. It says nothing, however, about other instances of absolute locality in syntax, such as adjunct or coordinate islands and freezing effects (e.g. Ross, 1967; Huang, 1982; Truswell, 2007). A larger remaining question, then, is whether these additional cases of absolute locality can similarly be reduced to other principles, or if the grammar must still maintain both absolute and relative

locality.

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Notes

¹This paper uses the Leipzig glossing abbreviations, with the following additions: AA = alternative agreement, ACCOMP = accomplishment marker, AOR = aorist, ASSOC = associative marker, AUG = augment prefix, CL = classifier, FV = final vowel, INSTR= instrumental, INV = inverse, OM = object marker, POT = potential mood, PSTPRT = past participle, SM = subject marker, TI = transitive inanimate. In glossing Bantu languages, cardinal numbers typically indicate noun class; local persons are distinguished from noun class by combining the number with SG/PL.

²There are two ways of deriving this distribution. One possibility is to assume that every C-head carries a [Wh] feature that has to attract a *wh*-term to its specifier. Only if the C-head carries an interrogative feature, it can remain in situ. The [Wh]-feature on C can remain unchecked in case there is no lower *wh*-term present (see Longenbaugh, 2019; van Urk, 2020; Newman, 2021). Alternatively, [Wh] can be seen as a subfeature of some higher clause-type feature [C]. Then matrix C and the *wh*-term would both carry [C: Wh]. A non-interrogative intervening C-head then would carry [C: decl] (in case of a declarative embedded clause). Still this [C:decl] feature would count as an intervener.

It should be noted that such proposals have also been implemented within Phase Theory to account for the fact that a non-interrogative C-head must be able to attract a *wh*-term to its specifier (see, for instance, Chomsky 2000, 2001, van Urk 2020, and also Bošković 2007 for an alternative proposal). Hence, this assumption is not an alternative to Phase Theory but rather an assumption that has to be made anyways.

³Note that even though the first movement step may violate featural Relativized Minimality (C intervenes between the raised and base copies of DP), under Attract Closest, this movement step is fine. This is the reason why Abels opts for Attract Closest instead of (featural) Relativized Minimality.

⁴Note that such features were rather mysterious in the time that Abels presented his thesis, but are now much more common under *failed agreement* or *Obligatory Operation* approaches (e.g. Preminger, 2014; Longenbaugh, 2019).

⁵There is some speaker variation here, where not every speaker likes (19b) with *all* appearing in Spec,TP.

⁶Unless independent evidence can be provided that there are multiple available specifiers of CP that can all function as escape hatches, but so far independent evidence for such landing sites has not been provided.

⁷We're using [phi] here, but other features could possibly be implicated; step one is simply to look for the specific evidence in a given language for what drives A-movement. See §3.5 for more discussion.

⁸In the previous section, we did not discuss this possible mechanism for alleviating minimality-based locality in the case of A-bar movement. Here, a difference between A-bar and A-configurations becomes salient: Following Abels (2003), we might assume that in A-bar dependencies, the embedded C head not only bears an intervening A-bar feature, but is itself a movement-triggering A-bar probe. As a result, successive cyclicity becomes the only means of alleviating intervention; the intermediate C will necessarily attract the embedded A-bar goal. By contrast, for A-

movement, we consider a slightly different scenario, in which the embedded clause bears features as a goal, rather than a probe.

⁹As we discuss in Section 3.2, we place Greek in two places in this typology because different embedded CPs show different behavior. Our discussion in 3.2 focuses on non-intervening CPs and not on the intervening type.

¹⁰We do not place Brazilian Portuguese in the typology above in the absence of detailed evidence regarding relevant properties. As (20) shows, we can rule out hyperraising via successive cyclic movement through CP edge. Greeson (2024) suggests that a persistent probing mechanism might be the most likely source of hyperraising in this language.

¹¹Iatridou and Embick (1997) do not illustrate with data from *na* subjunctive clauses but only (in detail) for other CP and TP clauses, but their claim appears to cover all clause types.

¹²Though we note that the minimality-based approach is still compatible with a possible lack of case in the embedded clause requiring raising to occur; it simply separates the distribution of case from expectations about the availability of raising.

¹³Zyman (2023) notes that for some speakers of English, agreement with conjoined CPs in English is degraded or impossible, but that hyperraising is still impossible for these speakers. There is certainly more to be understood here, including the possibility that some varieties of English may in fact have a form of hyperraising, as Greeson (2023) argues.

¹⁴We thank a reviewer for raising this issue.

¹⁵One might wonder, as a reviewer notes, if these differences between CPs in Greek can be accounted for simply by pinning phasality in Greek to the larger phrases that have been proposed for *oti/pu* clauses. As we discuss in section 5, while it may be possible to associate phasality with specific phrases in order to capture a particular phenomenon in a particular language, it becomes difficult to maintain a cross-linguistically coherent approach to phasality.

¹⁶As van der Wal (2015) notes, it is difficult in many cases to assess whether a particular T agreement marker tracks a clause, since 15 agreement is homophonous with 17 default agreement. However, as she notes, infinitives in the language clearly bear class 15 morphology and phi-features. In copular clauses, for example, where default agreement would not be expected, we find infinitival subjects controlling class 15, as in (27b).

¹⁷While true raising is absent, van der Wal (2015) notes that Makuwa employs a construction with a thematic experiencer subject in place of *seem*-type raising predicates:

- (45) Ki-ná-móóná ntokó wíírá n-náá-ki-thépya
1SG.SM-PRES.DJ-see like COMP 2PL.SM-PRES.DJ-1SG.OM-lie
‘It seems like you are lying to me = ‘I look/see as if you are lying to me.’ (van der Wal, 2015, (39))

¹⁸Halpert (2019) shows that both CPs and infinitive TPs control class 15/17 phi-agreement in contexts where default

agreement is not permitted, as with object agreement.

¹⁹The EPP property here is merely descriptive; Halpert (2019) does not offer a deeper explanation for why it holds in Zulu.

²⁰A reviewer asks whether raising out of CP in Zulu could be due to transfer of phase-head status from finite C to T in the embedded clause, along the lines of Chomsky (2015). We do not believe this is a possible line of analysis for Zulu: as we can see in the data, the finite embedded complementizer has a distinct set of phi-features from the finite T head, which agrees with the subject. In addition, as Halpert (2019) shows, the matrix T interacts with both of these sets of features in a hyperraising construction, with either one able to be realized morphologically.

²¹We note here that pure Relativized Minimality does not necessarily have anything to say about improper movement, but certainly would be compatible with a separate constraint on movement paths. We set aside this issue as orthogonal to the question of whether phases or Relativized Minimality offer a better account of cross-clausal dependencies.

²²As a reviewer notes, this possibly asymmetry is intriguing. While the reviewer suggests that such a gap may provide counterevidence against raising-via-CP-edge accounts like Fong (2019), we believe that, if it is indeed a true gap, it could also arise simply due to differences in the types and distribution of features involved in raising-to-object vs. raising-to-subject. We consider this a promising area for future research.

²³These facts straightforwardly follow if QR is indeed movement that takes place at the LF branch of grammar. Note that this does not exclude other cases of apparent covert movement where movement takes place in narrow syntax, but where a lower copy is realized (cf. Bobaljik, 2002). Such cases have indeed been attested, for instance in Yuan (2025), who argues that Stray Affix filter requirements can trigger this. But there is no independent evidence that plain cases of QR or covert topicalization should be treated analogously.

²⁴If CP can control agreement, it should be explained why agreement is then always with the absolutive topic (when present) and not possible with both the topic and the CP, as neither is an intervener for the other. A potential explanation could be that noun class III is more marked than (default) noun class IV, and agreement is always with the most marked form. Otherwise, this would favor the Agree-account over the covert movement account.

²⁵See also Fry and Mathieu (2017) who argue that LDA does bring in a semantic effect in terms of evidentiality and belief attribution. In short, they argue that only in the case of *de re* belief LDA is possible in Algonquian. They account for that by postulating that the C-heads of such belief reports attract the goal to their specifier, but other accounts in terms of differences in clause size or (phi-)properties of the relevant C-heads are possible as well. Their observations and account are there at best compatible with phasality but do not necessarily support a phasal account.

²⁶We follow the original glossing in these examples, where 3 denotes (non-default) noun class III.

²⁷While Bešlin discusses both optional A-movement and optional agreement, we here focus on the possibilities for optional LDA between the matrix clause and the embedded subject.

²⁸Bešlin follows Todorović and Wurmbrand (2020), who developed various diagnostics (including a.o. the temporal interpretation of the embedded clause with respect to the matrix, the possibility of clitic climbing, and the availability of the perfective aspect in the embedded clause) to determine whether embedded clauses selected by *trebati* are CPs, TPs, or vPs. According to all of these, *trebati* behaves like a verb that directly takes a TP complement. Ergo, there could not have been a C-head from which T would have inherited its potential phasality, rendering a Phase Inheritance approach implausible.

²⁹For instance, in Greek hyperraising is possible out of subjunctive clauses but not out of indicative clauses. One could argue on these grounds that indicative clauses are full CPs while subjunctive clauses would be structurally smaller, e.g. only FinPs. If only full CPs are phases, then the restriction of raising to subject to subjunctive clauses would readily follow. However, this would also come with a prediction that generally languages should allow raising to subject out of subjunctive but not out of indicative clauses, which is clearly incorrect. In order to maintain the hypothesis, one would have to argue that both subjunctive and indicative clauses can structurally differ in size per language and arguably even within languages. Or one would have to argue that it may differ per language which head counts as a phase head. The former would require independent evidence and explanations as to what determines the size of a clause, which is currently lacking. The second would indeed lack a principled and coherent definition of what counts as a phase.

³⁰Keine & Zeijlstra's and our approaches are similar in spirit in that they outsource alleged phasality effects to Relativized Minimality, but also differ in that for vP phasality they argue that intervening phrases may trigger successive cyclic movement, whereas our approach puts more burden on intervening heads. However, there is nothing that would a priori rule out both types of interveners to play a role in locality and successive cyclic movement.

³¹Keine (2019, 2020b) has independently argued that this type of variation is necessary, with a different theoretical formalization.

³²This big question—of what determines the feature distribution on CP and TP—is beyond the scope this paper, but deserving of consideration. We simply take as our starting point the observable variation in both the structural and featural properties of embedded clauses within and across languages.