Introduction: Within Distributed Morphology (Halle and Marantz 1993), there are two types of movement that are said to occur at PF, Lowering and Local dislocation (Embick and Noyer 2001, 2005). While there are many examples crosslinguistically of Local Dislocation (cf. Embick and Noyer’s 2005 discussion of reflexives in Huave), there are very few attested cases of Lowering. The most well known Lowering case comes from English, where tense morphemes lower from T to the verb. The fact that there are so few well attested cases of Lowering brings up the question of whether the attested cases can be analyzed another way, and whether we need to refer to Lowering as a theoretical tool at all.

Here I present evidence from Guébie (Kru, Niger-Congo)[Côte d’Ivoire] in favor of Lowering as a true theoretical operation. Guébie is an SOV language, though in the absence of an overt auxiliary, V moves to T, resulting in SVO order. Based on evidence from word order in main and embedded clauses, negation, information structure facts, and passives, I demonstrate that the verb surfaces in T in Guébie, not in C as in a verb-second analysis (den Besten 1977 and many others thereafter). After establishing that the surface position of V is T, I demonstrate that the polar question particle in Guébie, which surfaces after the inflected verb, is subject to Lowering. The crosslinguistic existence of data like English ‘affix hopping’ and Guébie polar questions provides evidence for Lowering as a typologically sound movement operation in the theory.

V surfaces in T in Guébie: The subject, and no other constituent, must surface before the inflected verb in Guébie. This is expected if subject movement to initial position is A-movement to spec-T, but not if it is A’-movement to spec-C. Since A’-movement is sensitive to information structure, we would not expect movement to spec-C to be limited to subjects.

(1) a. ɔ³ ji³ d₃a₃¹ li²
   3.SG will.IMPF coconuts eat
   ‘He will eat coconuts’

b. ɔ³ li² d₃a₃¹
   3.SG eat.IMPF coconuts
   ‘He eats coconuts’

c. *d₃a₃¹ li³ ju⁴
   coconuts eat.PFV boy
   Intended meaning: ‘A/the boy ate coconuts’

d. *(k)u₆ɔ⁴ li³ ju⁴ d₃a₃¹
   yesterday eat.PFV boy coconuts
   Intended meaning: ‘Yesterday a/the boy ate coconuts.’

Furthermore, in embedded clauses, an overt complementizer does not block upward movement of the verb as we might expect if the verb was moving to C. Verb movement is not in complementary distribution with overt C heads, which serves as further evidence that the verb surfaces in T and not C. With this and other data, I demonstrate that the landing site of the inflected verb in Guébie is T, and that all inflection in the language prefers to be realized on the T head.
Lowering in Distributed Morphology: Evidence from Guébie polar questions

Polar questions in Guébie: The polar question particle in Guébie surfaces immediately after the inflected verb. As in (2b) versus (2c), the question particle has two forms that co-vary with aspect. No matter whether an auxiliary or a main verb is in T, the polar question particle is incorporated as a suffix into that T-head.

(2) Polar question particle incorporated into T

a. dʒatʃ'i^2.2 wa^-2 se^4 touri^1.1.3
   Djatchi.NAME like.IMPERF- Q.IMPERF Touri.NAME
   ‘Does Djatchi like Touri?’
b. dʒatʃ'i^2.2 ji^-3 se^4 dʒa^31 li^2
   Djatchi.NAME will- Q.IMPERF coconuts eat
   ‘Will Djatchi eat coconuts?’
c. dʒatʃ'i^2.2 li^-3 gbe^4 dʒa^31
   Djatchi.NAME eat.PFV- Q.PFV coconuts
   ‘Did Djatchi eat coconuts?’

Polar question particles mark clause type, and are therefore generated in C or in some projection of C, such as Force (Rizzi 1997). If the question particle is generated in C, as in the tree below, we can ask how it comes to surface lower than the verb, which is in T.

(3) Guébie polar question structure

The analysis: Here I present an analysis of word order in Guébie polar questions as undergoing Lowering at PF. The question-marking C-head lowers to T, where it is incorporated into the inflected verbal element. This presents a convincing case of Lowering, which suggests that it is a sound, typologically motivated theoretical operation.