Some general questions:

- How are grammatical formatives blocked when they are superfluous to a derivation?
- How does the child learn the particular contexts which use grammatical formatives without overgeneralizing?

The phenomenon: Grammatical formatives are blocked when unnecessary:

1. John writes books.
   a. John does write books.
   b. * John not writes books.

2. John is too fond of Mary.
   a. John is too much fond of Mary.
   b. * John is too much fond of Mary.

Overview:

- Briefly review Chomsky’s (1991) analysis of *do-support
- Discuss issues of learnability and economy raised by Arnold (1995)
- Review an alternative approach to *do-support in Distributive Morphology
- Propose a modification which extends the analysis to another grammatical formative, *much, and discuss consequences

1. An Economy Account

   a. John writes books.
   b. * John does write books.
   c. * John not writes books.
   d. John does not write books.

   a. The contrast between (1c) and (1d) follows from an ECP violation. In (1c), I lowers to V forming an improper chain (tI, I), and then V covertly raises to I, eliminating the improper chain and forming (V, tV). However, the presence of Neg in (1d) results in an ECP violation from covert raising of V to I.
   b. The contrast between (1a) and (1b) follows from economy. Insertion of do in (1b) is a language-specific operation, which is argued to be more costly than use of a universal operation as in (1a).

2. Noted Learnability Problems and a New Economy Proposal

   a. John writes books.
   b. John writes not books.
   c. John does not write books.

   a. The contrast between (1c) and (1d) follows from economy. Given the presence of Neg, *do-support as first resort is more economic that V-I movement with reconstruction of V. Thus in (1d) V stays in-situ and do-insertion is supported by the presence of Neg.
   b. The contrast between (1a) and (1b) follows also from economy. (1b) should be permissible by the grammar, but is argued to be ruled out by economy of lexical insertion by the existence of (1a). In (1a), V raises to I and then reconstructs.

3. A Distributed Morphology Alternative

   a. John writes books.
   b. * John does write books.
   c. * John not writes books.
   d. John does not write books.
4. Late Insertion of Grammatical Formatives

(12) [+ past] \(\Rightarrow\) did
[+ participle] \(\Rightarrow\) doing
[3sg] \(\Rightarrow\) does
[ ] \(\Rightarrow\) do

5. much-support

(13) a. as intelligent (as Bill)
   b. how intelligent
   c. that intelligent
d. too intelligent
e. so intelligent

(14) a. \([\text{AP} \{\text{DegP as/how/that/too/so} \ [\text{op} \text{ much}] \ [\text{A intelligent}]\} \ [\text{A intelligent}]\] 
   b. \([\text{DegP as/how/that/too/so} \ [\text{op} \ (*\text{much})] \ [\text{A so}]\] \)

(15) a. \([\text{DegP as/how/that/too/so} \ [\text{op} \ e \ [\text{A intelligent} \ G]\] \]
   b. \([\text{DegP as/how/that/too/so} \ [\text{op} \ intelligent \ G] \ [\text{A so}]\] \)

(16) a. \([\text{DegP as/how/that/too/so} \ [\text{op} \ e \ [\text{A so} \ G]\] \]
   b. \([\text{DegP as/how/that/too/so} \ [\text{op} \ \text{much} \ G] \ [\text{A so} \ G]\] \)

7. Conclusions

Under this framework, grammatical formatives become part of standard lexical insertion.

- Simplex functional heads trigger grammatical formative insertion
- Complex functional heads do not trigger grammatical formative insertion

Grammatical formatives are predicted to be easily learned as they are part of learning the language’s Vocabulary.

A strong prediction: A child will never assume that a simplex head can be null.

Further work: This account may generalize to other formatives (for instance, expletives and resumptive pronouns).