

By Me Bein' Pregnant I Would Stay Sick All the Time: Causal *by* and *from* in African American Vernacular English

Author(s): Kathleen Carey and Patricia Cukor-Avila

*Proceedings of the Twenty-Second Annual Meeting of the Berkeley Linguistics Society: General Session and Parasession on The Role of Learnability in Grammatical Theory* (1996), pp. 46-47

Please see "How to cite" in the online sidebar for full citation information.

Please contact BLS regarding any further use of this work. BLS retains copyright for both print and screen forms of the publication. BLS may be contacted via <http://linguistics.berkeley.edu/bls/>.

---

*The Annual Proceedings of the Berkeley Linguistics Society* is published online via [eLanguage](#), the Linguistic Society of America's digital publishing platform.

**By me bein' pregnant I would stay sick all the time:  
Causal *by* and *from* in African American Vernacular English\***

Kathleen Carey  
Patricia Cukor-Avila  
University of North Texas

## **1.0 Introduction**

Very little research in African American vernacular English (AAVE) has focused on preposition usage, some notable exceptions being Sommer (1986, 1991), Nichols (1986) and Orr (1987). The present paper attempts to fill this gap by examining AAVE usage of *by* and *from* to express notions within the domains of means, cause and agency. The first part of the paper examines standard Present Day English (PDE) causal uses of *by* and *from*, in particular, considering how particular semantic constraints on their usage result from the spatial metaphors on which they are based. The second part describes AAVE *from* and *by* usage, focusing on the features that distinguish it from standard usage. The final section of the paper attempts to determine whether the AAVE features represent old or innovative features of AAVE, and for the innovative ones, proposes paths of semantic extension that will account for them.

The primary data for this paper come from tape-recorded speech of four generations of AAVE speakers in the rural east-central Texas community of Springville (Cukor-Avila 1995). In order to determine whether a particular feature is old or innovative we have also consulted data from interviews with former slaves, transcribed in Bailey, Maynor, and Cukor-Avila (1991), data from the Linguistic Atlas of the Gulf States (LAGS), which includes recorded speech from respondents born between the 1880s and the 1960s, (Pederson et al. 1981), as well as historical data from the O.E.D. We have supplemented these data with evidence from two computerized sources: the Brown Corpus of written American English and the London-Lund Corpus of spoken British English.

## **2.0 Causal *by* and *from* in standard PDE**

### **2.1 Properties of *from* in standard PDE**

Within the framework of cognitive functional linguistics, there has been considerable research demonstrating the semantic links between spatial and non-spatial uses of prepositions, most notably Brugman (1981), Sweetser (1988), Genetti (1986) and Rice (1992). In particular, causal uses such as (2) have been claimed to be metaphoric extensions of spatial uses, such as (1).

- (1) Fred traveled from Spain to France.
- (2) John got sick from eating the oysters.

Both Vamparys (1984) and Radden (1985) note that the causal uses of *from* are 'non-volitional.' Vamparys cites examples such as (3) and (4) below as demonstrating that causal *from* uses involve a non-volitional event or entity causing a state or process over which the subject has no control:

- (3) My guns were a bit rusty, from the wet weather.  
 (4) She died recently, from what cause? (Vamparys 1984: 401)

Both of these examples demonstrate that the cause referred to in the *from*- clause is non-volitional and is typically an inanimate NP. A survey of the Brown Corpus confirms the claim that *from* causal uses are non-volitional. Some examples from the Corpus are listed in (5) and (6) below. (In example (6), the object of *from* is a gerund-phrase rather than a noun phrase):

- (5) Boyer is suffering from a stiff neck.  
 (6) Our necks are stiff from gazing at the wonders of outerspace.

Since causal *from* is non-volitional, it follows that this construction cannot be used to mark the agent in passive clauses because agents are prototypical volitional causers. The ungrammaticality of *from* as a marker of agentivity is shown in (7):

- (7) \* Fred was killed from the gangsters.

It is interesting to note that none of the examples in (3) - (6) included an agent in the main clause. This fact is not accidental since causal *from* in standard PDE does not permit main clause agents, as is shown by the ungrammaticality of (8) and (9). These examples also demonstrate that *from* cannot be used to express the reason for the main clause situation.

- (8) \* Mary went to the doctor from a stiff neck.  
 (9) \* John fixed the clock from its being broken.

Another property associated with causal *from* is that the event referred to in the *from*-phrase must temporally precede the event specified in the main clause. When the two events are simultaneous, as in (10), the sentence is ungrammatical or at least questionable. If the main clause situation expresses the resultant state of the causal action rather than a temporally coincident event, the construction is grammatical, as is seen in (11):

- (10) \*?I got burned from putting my hand on the hot stove.  
 (11) I have a scar from putting my hand on the stove.

Based on the preceding evidence, we can now summarize the properties of causal *from* in standard PDE:

- i. *from* marks non-volitional causers (→ *from*-phrase cannot mark agents in passive constructions)
- ii. subjects of the main clause are non-agentive (→ *from*-phrase cannot express reasons)
- iii. event referred to in *from*-clause temporally precedes event/state referred to in the main clause

### 2.1.1 Accounting for the properties of causal *from*

Both Radden (1985) and Vamparys (1984) argue that the properties of causal *from* can be traced back to the spatial metaphor on which the construction is based. Their metaphoric explanation of the origin of causal *from* is as follows: through a space → time metaphor, events specified in a *from*-clause are perceived as temporally preceding events specified in the main clause. In our folk-theoretical view of causation, if one event temporally precedes another, then the first event is perceived as the cause and the second the effect, a classical fallacy known as “post hoc, ergo propter hoc.” Consequently, situations specified in the *from*-phrase are perceived as the cause of the situation in the main clause. The claim that these constructions are based on a space → time metaphor explains the temporal separation between the causing event and the situation in the main clause in *from* constructions.

Vamparys (1984: 402) proposes that the non-volitional property of causal *from* can also be traced to its original locative meaning: “*From* expresses a functional relationship between an entity and its source. The functional relationship explains the use of *from* to refer to non-intentional causation. The relationship between the cause and the person affected by it is a mere functional one: the person is not involved in it, but merely affected by it.” This statement seems to suggest that the spatial metaphor underlying causal *from* restricts it to non-volitional causation. However, Clark and Carpenter (1989: 7) demonstrate that children use *from* to mark both volitional and non-volitional causation. In fact, children typically use *from* to mark the agents in passive constructions, as in examples (12) and (13) below, only later acquiring the use of *by* in these constructions. They also use *from* to mark volitional causers in non-passive contexts, as in (14), and non-volitional causers, such as in (15) (in accordance with standard PDE usage).

- (12) Some women were arrested from the soldiers.
- (13) No, he isn't going to get hurt from those bad guys.
- (14) This fall down from me. (knocking pieces of sandwich off his plate).
- (15) I not tired from my games.

Clark and Carpenter's study shows that children first acquire locative uses of *from* and then later press *from* into service as a marker of agency or cause. The fact that children do this without ever hearing examples of this type suggests that the notion of ‘source’ provides a conceptual link between these domains. Clark and Carpenter claim that the notion of source itself is really an abstract temporal relation between two entities A and B, where A temporally precedes B. A and B can be places, people or events: “Source, then, is property that initial locations bear to final locations, that agents bear to patients or themes, and that causes bear to effects . . .” (Clark and Carpenter 1989: 24). In this account, the shift from space → cause does not involve the intermediate step of a space → time metaphor: temporality is inherent in the original locative sense of *from*, since movement in space necessarily also involves “movement” through time. Most importantly, Clark and Carpenter's study indicates that agency and non-volitional causation can be conceptually linked by the notion of source. Interestingly, the only causal situation in which the children do not use *from* is to express reasons: in those cases, *because* was used instead, as in example (16).

- (16) Could I have another gingersnap 'cos I want to put in my mouth and drink at the same time? (Clark and Carpenter 1989: 21)

The avoidance of *from* to express reasons can perhaps be accounted for as follows: the existence of a reason specified in the *from* phrase entails that there is a volitional (reasoning) agent in the main clause. Consequently, the primary source of the event/situation in the main clause is not the reason in the *from*-phrase but rather the reasoning main clause subject. In this way, the conceptual notion of source can explain the exclusion of main clause agents in *from* constructions, since, as sources of energy/volition, main-clause agents compete with the source specified in the *from*-phrase.

## 2.2 Properties of *by* in PDE

In standard PDE, the *by* + NP construction differs significantly from the *from* + NP construction in that it is used to express the means by which an event occurs rather than the cause of the event. Some examples of this from the Brown Corpus are listed in (17) and (18). These examples show that the *by* + NP construction in standard PDE indicates direct means only -- the NP specified in the *by*-clause must participate directly in the situation in the main clause, as is seen in the ungrammaticality of (19). Note that the preposition *through* would be grammatical in this context because it is the preposition used to express indirect means in standard PDE.

- (17) Heating is by individual, gas-fired warm-air systems.  
 (18) It is connected by teletype with the state library in Albany.  
 (19) \* He got a raise by hard work.

The *by* + NP construction in standard PDE is also used to mark agents in passive constructions, as in example (20):

- (20) Fred was eaten by a tiger.

Additionally, the Brown and London-Lund corpora rendered numerous examples of the *by* + gerund construction. Significantly, none of the 35 examples extracted from these data had a stative situation in the main clause; all of the main clauses involved dynamic situations. The prototypical *by* + gerund construction, as is exemplified by (21) - (24), involves a volitional agent attempting to realize the goal specified in the main clause by means of an action specified in the *by*-clause. However, the cause-effect relationship need not be intentional, as is clearly shown by (24), in which the golfer presumably was not trying to bogey the 15th hole:

- (21) They are preoccupied with ending labor abuses by extending the anti-monopoly laws to the unions.  
 (22) . . . suspend him from the light fixture by tying the strings to the lamp base.  
 (23) Any needy family living in San Francisco can obtain toys by writing to Christmas toys . . .  
 (24) He bogeyed the 15th by missing a short putt.

The absence of stative situations in the main clauses of the corpora data is not a statistical accident; they are ungrammatical in this construction, as is demonstrated by the ungrammaticality of example (25):

(25) \* I am sick by eating too many oysters.

Unlike causal *from*, constructions with *by* + gerund do not permit the event specified in the *by*-phrase to be temporally separated from the event specified in the main clause, as is seen in (26) below:

(26) I got really tired this afternoon from/\* by not sleeping much last night.

The properties of the *by* + NP and *by* + gerund (means) constructions in standard PDE can be summarized as follows:

*by* + NP

- i. direct (not indirect) means
- ii. agent in passive constructions

*by* + gerund (means)

- i. does not permit stative situations in the main clause
- ii. permits agents in the main clause
- iii. does not permit temporal separation of the situation referred to in the main clause and the situation referred to in the *by*-phrase.

### 2.2.1 Accounting for the properties of *by*

Radden (1985) provides a metaphoric account of the origins of the means uses of *by*. He proposes that the means use of *by*, illustrated in examples (27) - (29), arose via metaphoric extension from spatial path uses of *by*, such as in example (30). A path is the means to a spatial goal in the same way that a telephone or train is a means by which travel or communication may occur.

- (27) We talked by telephone.
- (28) They arrived by train.
- (29) I knew it was you by your voice.
- (30) We arrived at the crossroads by that path.

This metaphoric explanation can perhaps help explain some of the properties of the *by* + gerund construction listed above. In spatial uses such as (30), the path is a means to attaining a spatial goal. Abstract *by* + gerund uses do not allow stative situations in the main clause because stative situations do not have an inherent goal or endpoint. Similarly, these constructions permit agents in the main clause because verbal actions that involve a goal or endpoint frequently have an agent. Finally, since a path is an integral part of movement towards a spatial goal, the means specified in the *by* - phrase of a *by* + gerund construction cannot be temporally separated from the main clause event that it is helping to bring about.

### 3.0 *by* and *from* in AAVE

The previous section has attempted to identify the special properties associated with cause and means uses of *by* and *from* standard PDE. It has also explored the extent to which these properties can be accounted for in terms of the spatial metaphors from which the causal/means uses were derived. However, one remaining question is whether the underlying spatial metaphor permanently constrains the types of uses that may emerge or whether these constraints may be overridden at a later stage in the development of the morpheme. A second question is whether abstract uses based on spatial metaphors of source (*from*) and path (*by*) must necessarily divide up the semantic territory of means, cause, and agency in the way that standard PDE does. For example, is it always the case, as in standard PDE, that a path preposition (such as *by*) marks agency whereas a source preposition (such as *from*) marks non-volitional cause? Recall that the Clark and Carpenter (1989) study demonstrates that children use one marker (*from*) to mark both agency and non-volitional causation. One way to explore these questions would be through a cross-linguistic investigation of marking patterns in source and path prepositions. The present paper will take an alternative approach and demonstrate that variation data can also be highly useful in answering these types of questions. In particular, the next section will demonstrate that abstract uses of *by* and *from* in African American Vernacular English (AAVE) differ in significant ways from the standard PDE usage described above, providing important information about semantic extension and conceptual categorization.

#### 3.1 Causal *from* in AAVE

The AAVE usage of *from* differs from standard usage described above in respect to the semantic role of the main clause subject. Examples (31) - (33) demonstrate that the main-clause subject in a *from* construction can have the semantic role of agent. Example (33) is particularly interesting because the object of the main clause (the teacher) is controlling the subject of the *from*-clause. These types of constructions did not appear in either the LAGS data, the ex-slave data, or the O.E.D. suggesting that these uses may be innovative rather than old, (although their absence from these sources may simply result from the rarity of the construction). Examples (31) and (32) from the Springville data provide an indication of how agency may have crept into the main clause of *from*-phrases. Although the verbs in (31) and (32) typically have main-clause agents, it is clear from the contexts in these two examples that the events were non-volitional, that is, the subject in (31) probably did not intend to run off her husband. Pseudo-agentive examples like (31) and (32) may have served as a stepping stone to examples such as (33), which undoubtedly involves a main-clause agent.

- (31) She ran him off from talkin' too much.
- (32) FW: How did she meet all those people?  
B: From runnin' the streets.
- (33) I hit a teacher from pushing around my sister. (Sommer 1991)

### 3.2 Causal *by* in AAVE

There are also several ways in which the means/cause uses of *by* in AAVE differ from the standard PDE usage described above. Whereas standard PDE usage only permits the *by*-construction to encode direct means, examples from the Springville data, (34) and (35), demonstrate that it can also be used to encode indirect means in rural AAVE:

- (34) Uh, but, you know it's grants an' stuff - jus' like I tol' you they'll show you how they can help you, get into some an' how you can get grants and stuff from the government by your income and stuff like that.
- (35) An that's how I buy all my school clothes by me workin' in the fields an' stuff.

In (35), working in the fields is not the direct means for buying clothes but rather the means for making money which is in turn used to buy clothes.

Another way in which Springville usage differs from standard PDE usage is the ability to have stative situations in the main clause, as is seen in examples (36) and (37):

- (36) I been sick by this hot sun.
- (37) V: Ohhh. Anyway we live, Huntsville. We lived in Huntsville for two months. An' I would stay sick all the time.  
FW: From bein' pregnant?  
V: By me bein' pregnant.

Note that in (37) above, the *by*-phrase is not a gerund with a deleted co-referential subject but is instead a small clause. This *by* + small clause construction is also used when the subject of the *by*-clause and the subject of the main clause are not co-referential, as is shown in (38) - (41) below:

- (38) You know, they was goin' crazy by me bein' young and not carin' about stuff.
- (39) You see, by her bein' too strict on me, I made the mistake anyway.
- (40) I guess by me workin and sometime I come in tired an stuff, they was gettin' where they wouldn' listen to me and stuff.
- (41) By my blood pressure being high that's why they rushed me to the hospital.

Since the subjects of the two clauses are not co-referential, this construction is clearly different from the prototypical *by* + gerund construction in standard PDE in which a volitional agent intentionally brings about the situation in the main clause by means of participating in the action specified in the *by*-clause. In examples (38) - (41), the cause-effect relationship is unintentional and is therefore closer to the standard PDE *from* prototype in that respect. However, unlike standard PDE causal *from*, this construction permits agents in the main clause and can be used to express reasons, as in (41).

The most strikingly distinct uses of *by* were not found in the rural

Springville data, but in data from Sommer and Sánchez on urban dialects of AAVE. Previous research on grammatical innovation and change in AAVE has shown that these innovations typically begin in urban areas and subsequently spread to rural communities as rural residents develop strong ties to the city (Cukor-Avila 1995; Cukor-Avila and Bailey 1996). It is therefore not surprising that the most innovative uses of *by* are found in the data from urban speakers. In examples (42) and (43) we can see the use of *by* in a context involving a participant that is both a source and an agent.

- (42) I got a black eye *by* this boy. (Sánchez 1981 cited in Orr 1987: 131)  
 (43) She had a telephone call *by* one of her friends. (Sommer 1980 cited in Orr 1987: 131)

### 3.3 Summary of causal *by* in AAVE

The properties of AAVE constructions that use *by* to mark cause, means or agency are summarized below:

#### *by* + NP

- i. direct means
- ii. indirect means
- iii. non-volitional causation
- iv. agent in passive constructions
- v. agent/source in non-passive constructions

#### *by* + small clause

- i. subject of the main clause need not be co-referential with subject of *by*-clause
- ii. permits stative situations in the main clause
- iii. permits agents in the main clause
- iv. non-volitional causation
- v. reasons

#### *by* + gerund

- i. seems to have the same properties as standard PDE usage but very few examples were found in the data

## 4.0 AAVE preposition features: old or innovative?

### 4.1 Retentions of old uses

The O.E.D. revealed that the *by* + NP construction covered a wider semantic territory in Middle English and early Modern English than it does in PDE, leaving open the possibility that some of the AAVE uses are old rather than innovative. Two examples in which *by* + NP is used to encode indirect means are shown in (44) and (45):

- (44) Hath he more benefit *by* his horse than *by* his Minister? (1622 T. Stroughton *Chr. Sacrif.* xvii.239)

- (45) Christe . . . draweth soules unto hym by his bloody sacrifice. (1548 Latimer *Serm. Ploughers* (Arb.) 34)

Additional evidence that the AAVE indirect means uses may be old rather than innovative comes from one example found in the ex-slave data:

- (46) Oh, to be [unintelligible] trying to do what I can, by the help of the Lord.

The O.E.D. also provides examples in which the sense of means approaches 'cause' as is seen in (47) - (49):

- (47) Soone after by this synne he felle. (1483 Caxton *G. de la Tour* H iiij)  
(48) Though flewme of hymself be thicke and vnsavory by strengthe of heete. (1495 Thevisa *Barth. De P.R.* iv.ix.)  
(49) A Hill almost unascendable, by the roughness of a craggy way. (1627 Feltham *Resolves* i.xxxix. Wks. (1677) 49)

Note that examples (47) -(48) are similar to the AAVE uses cited in (36) and (37) above in that they involve non-volitional causation, and in the case of (48) and (49), a stative situation in the main clause.

#### 4.2 Innovative uses

The AAVE data contain two constructions which do not appear in either the O.E.D., LAGS or ex-slave recordings, suggesting that these uses are innovations rather than retentions of older forms. One of these constructions is the use of *by* + small clause as is shown in example (41) repeated as (50) below:

- (50) By my blood pressure bein' high that's why they rushed me to the hospital.

This construction is unique in that it links the following three features: (1) the ability to have non-coreference between the subjects of the two clauses; (2) the ability to express non-volitional causation; (3) the ability to have agents in the main-clause. Consequently, this construction can be used to express reasons, as in the example above: reasons cannot be expressed with either *from* or *by* in PDE. While we will not attempt to propose a definite path of semantic extension for this innovation, it is worthwhile to note that it shares some features with AAVE *by* + NP, namely that it can express non-volitional causation and permits stative situations in the main clause. Since the *by* + NP uses appear to be retentions of old uses, they may have served as a starting-off point for the *by* + small clause construction.

Other examples which do not appear in the O.E.D., LAGS or the ex-slave data are ones in which the *by*-phrase marks an animate participant in a context in which it is both a source and an agent. This evidence suggests that examples such as (42) and (43) are representative of innovative features. Examples of this type are questionable or ungrammatical in standard PDE because a *by*-phrase can mark

agency only if a passive participle is present. While no examples of this type appeared in the Springville data, the Springville data do provide an indication of how these uses originated. First, in the entire Springville data set there were only four passives with *by*-phrases -- each of these four passives was a *get*-passive, as in (51) and (52), and all were uttered by younger speakers:

- (51) She got beaten up by her boyfriend once.  
 (52) We gave, no we gave Scrubby away and most of em' got killed by trains.

Example (53), which is not a true passive though a passive participle is present, is even more telling:

- (53) I got my teeth knocked out by a girl once.

This example is semantically very similar to (42) which is repeated below in (54a). (54a) can be paraphrased as (54b), and in this form it is grammatically and semantically analogous to (53) above. The difference between (54a) and (54b) is that in (a) the situation is specified by an NP, whereas in (b), it is specified as a small clause:

- (54a) I got [a black eye] by this boy.  
 (54b) I got [an eye blackened] by this boy.

Based on the evidence from rural and urban AAVE we can now propose a series of steps accounting for the emergence of uses such as *I got a black eye by this boy* and *She had a telephone call by one of her friends*:

- i. The prevalence of the *get*-passive with *by*-phrases strengthens the association of the verb *get* with an agentive *by*-phrase.
- ii. Passive-like structures such as *I got my teeth knocked out by a girl once* provide a stepping stone to the new construction *I got a black eye by this boy* because, while they are grammatically different, they are semantically very similar.
- iii. Uses such as *I got a black eye by this boy* conventionalize the construction "*get* + NP + *by*-phrase", where *by* marks agency in a context in which the agent is also a source.
- iv. By analogy, the construction extends to other verb + NP uses, such as the one in *She had a telephone call by one of her friends* in which the NP marked by the *by*-phrase is both source and agent.

### 4.3 Summary

This section has demonstrated that some of the AAVE uses of *by* appear to be retentions of old uses, namely, use of *by* + NP to express indirect means and non-volitional cause. Other uses of *by* appear to be innovative: (1) the use of *by* + NP

to mark NP's that are both agents and sources in non-passive contexts and (2) the use of *by* + small clause as a causal connector, similar to PDE *because*.

## 5.0 Conclusions

This paper has shown the AAVE uses of *from* and *by* within the domains of means, cause, and agency differ in significant ways from corresponding PDE usage. We have attempted to explicitly characterize these features, and have shown that some of these uses are retentions of old uses while others are innovative. In this way, we have hoped to contribute to the body of descriptive research on African American Vernacular English. We have also hoped to demonstrate that variation data can provide insight into the nature of semantic extension and conceptual categorization. Recall that some of the semantic constraints on PDE usage were proposed to have stemmed from the spatial metaphors of source and path on which the cause and means constructions were based: the AAVE data demonstrate that these metaphor-derived constraints may only be operating early on in the development of the cause/means uses. For example, the AAVE *by* + NP construction and *by* + small clause construction both permit stative situations in the main clause, that is situations without an inherent goal or endpoint, even though the underlying spatial metaphor involves the attainment of a spatial goal. AAVE usage of *by* demonstrates that a path preposition is not limited to marking direct means but can also come to mark indirect means, non-volitional cause and even reasons.

The AAVE data have also shown that PDE is just one example of how source and path prepositions can divide up the semantic territory of means, cause, and agency. Unlike PDE, AAVE uses the same preposition (*by*) to mark both non-volitional cause and agency. Interestingly, the children in the Clark and Carpenter (1989) study are also using a single preposition to mark both agency and non-volitional cause, although they do it with the source preposition *from*. This connection is not surprising because the AAVE use of *by* is source-like in other ways as well in that agentive *by* can mark NP's that are both source and agent, as in examples such as *She had a telephone call by one of her friends*. In this way, the AAVE data demonstrate that path prepositions can come to mark source-like notions. In examining AAVE usage of *from* we find the reverse pattern: the source preposition *from* is becoming slightly more means-like by permitting main-clause agents. The additional loss of the feature of temporal separation (such examples were not found in the data) would result in a means use of *from*, as in *I killed the fly from swatting it*. Clearly, the AAVE data have provided a completely different model of how source and path prepositions can divide up the territory of means, cause, and agency, and in so doing, have revealed much about the potential for semantic extension within these domains.

---

\*We would like to thank Suzanne Kemmer for raising issues that helped clarify the arguments presented in this paper.

---

Bailey, Guy, Natalie Maynor, and Patricia Cukor-Avila eds. 1991. *The emergence of black English: Text and Commentary*. Philadelphia: John Benjamins.

- Brugman, Claudia. 1981. The story of *over*. MA Thesis UC, Berkeley.
- Clark, Eve and Kathleen Carpenter. 1989. The notion of source in language acquisition. *Language* 65.1-30.
- Cukor-Avila, Patricia. 1995. The evolution of AAVE in a rural Texas community: An ethnolinguistic study. University of Michigan Dissertation.
- Cukor-Avila, Patricia and Guy Bailey. 1996. The spread of urban AAVE: A case study. *Sociolinguistic variation: Data, theory, and analysis. Selected papers from NWAV-23 at Stanford* ed. by Jennifer Arnold, Renee Blake, Brad Davidson, Scott Schwenter, and Julie Solomon, 469-85. Stanford: CSLI Publications.
- Genetti, Carol. 1986. The development of subordinators from postpositions in Bodic languages. *Proceedings of the twelfth annual meeting of the Berkeley Linguistics Society*, 387-400.
- Nichols, Patricia. 1986. Prepositions of black and white English of coastal South Carolina. *Language variety in the South: Perspectives in black and white* ed. by Michael B. Montgomery and Guy Bailey, 73-84. Tuscaloosa: University of Alabama Press.
- Orr, Eleanor. 1987. Twice as less: Black English and the performance of black students in mathematics and science. New York: W. W. Norton.
- Pederson, Lee, Guy Bailey, Marvin W. Bassett, Charles E. Billiard, and Susan E. Leas, eds. 1981. *LAGS: The basic materials*. Ann Arbor: University Microfilms International.
- Radden, Günter. 1985. Spatial metaphors underlying prepositions of causality. *The Ubiquity of metaphor: Metaphor in language and thought* ed. by Wolf Paprotté and René Dirven, 177-207. Philadelphia: John Benjamins.
- Rice, Sally A. 1992. Far afield in lexical fields: The English prepositions. *ESCOL '92* ed. by M. Bernstein, 206-217.
- Sommer, Elisabeth. 1991. Prepositions in black English vernacular. *The SECOL review* XV: 183-99.
- Sweetser, Eve. 1988. Grammaticalization and semantic bleaching. *Proceedings of the fourteenth annual meeting of the Berkeley Linguistics Society*, 389-405.
- Vamparys, Johans. 1984. Source metaphors in English. *Journal of Pragmatics* 8.395-410.