Was/were Variation in the Middle Rocky Mountains

Lamont D. Antieau
Independent Scholar

1. Introduction

Although was/were variation is one of the most widely studied vernacular features in English (Adger and Smith 2005: 155), little attention has been paid to its presence in western varieties of American English, despite the insight such an investigation might provide to both the linguistic phenomenon and to regional varieties that have been generally overlooked in the sociolinguistic literature. In this study, therefore, I analyze was/were variation in the middle Rocky Mountain by applying corpus tools to a set of 70 interviews collected in Colorado, Utah, and Wyoming toward the compilation of a Linguistic Atlas of the Middle Rockies (LAMR) and compare findings from this analysis with those of studies on was/were variation in other varieties of English. In light of these findings, I will address some theoretical issues concerning was/were variation, particularly the popular notion that it adheres to an implicational scale and how well this scale applies to was/were variation in the LAMR collection.

2. Previous literature

At the core of the argument on was/were variation in English is the observation that the standard paradigm for agreement between past tense forms of BE and the personal pronouns in nominative case is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First person</strong></td>
<td><em>I</em> was</td>
<td><em>we</em> were</td>
</tr>
<tr>
<td><strong>Second person</strong></td>
<td><em>you</em> were</td>
<td><em>you</em> were</td>
</tr>
<tr>
<td><strong>Third person</strong></td>
<td><em>he, she, it</em> was</td>
<td><em>they</em> were</td>
</tr>
</tbody>
</table>

Table 1: Personal pronoun paradigm and past tense BE

In other words, with respect to personal pronouns in Standard English, was is used as the past-tense copula in conjunction with singular subjects (*I, he/she/it*), while were is used with plural pronoun subjects (*we, they*) and pronoun subjects that are unmarked for number (*you*). This singular-plural distinction is maintained outside of the pronoun paradigm, as was is standard with singular NP subjects, while were is standard with full noun phrases overtly marked for plurality (*some girls, the dudes*) and in existential constructions when used to link *there* and plural NPs (*There were some girls with the dudes*).

However, among others, Cheshire and Fox (2009: 3) note that the use of was with first- and third-person singular subjects and were elsewhere has only become stable in standard varieties of English, and that in nonstandard varieties of English, was/were variation tends to be the norm. As such, numerous scholars have investigated was/were variation in many varieties of English, using several different terms to label the phenomenon. Labov et al. (1968) and Feagin (1979) use the term “invariant was” in their work in Harlem and Anniston, respectively, while in their investigation of Appalachian English, Wolfram and Christian (1976) use the label “subject/verb nonconcord.” Chambers (1995: 242) uses the term “default singulars” and elsewhere has called
them “primitives of vernacular dialects” and “vernacular universals” (Chambers 2001). The current study follows others (e.g. Cheshire and Fox 2009; Anderwald 2001; Tagliamonte 1998) that simply refer to the phenomenon as was/were variation.

Much of the research on was/were variation has centered around the use of nonstandard was with specific subject-types comprising the nominative personal-pronoun paradigm, plural noun phrases, and there in plural existential constructions. Additionally, many researchers have presented linguistic evidence showing that the use of was with these different types of subjects is not random but occurs in predictable rankings within communities (e.g. Feagin 1979; Chambers and Trudgill 1998; Chambers 2004; Adger and Smith 2005). In her work on the speech of Anniston, for instance, Feagin (1979) observed a linguistic constraint in which was occurred as the copula linking existential-there and plural noun phrases, and then, in decreasing frequency, with you, we, overtly plural noun phrases, and they. Following Chambers and Trudgill (1998: 132), this ordering is illustrated with representative examples below:

A) They was all born in Georgia, mama and daddy both. (third-person plural pronoun)
B) All the student teachers was comin’ out to Wellborn. (overtly plural full NPs)
C) We was in an ideal place for it. (first-person plural pronoun)
D) You was a majorette? (second-person pronoun)
E) There was about twenty-somethin’ boys and just four girls. (expletive there)

Some research has gone beyond depicting this ordering as a ranking within communities to claim the presence of an implicational scale underlying its use: for those speakers who use nonstandard was after only one of these subject-types, that subject-type is existential-there; for those speakers who use it with two subject-types, the two types are existential there and you; if it used with a third type, that type is we, and so on (Chambers and Trudgill 1998: 132).

A scale of subject-types with existential there at one end and they at the other has been adopted by several variationists (e.g. Tagliamonte 1998; Chambers 2004), and evidence of this ordering has been found to operate in varieties of American English (Schilling-Estes and Wolfram 1994: 285) and in such disparate places as Anniston, Alabama (Feagin 1979), and Buckie, Scotland (Tagliamonte and Smith 1998; Adger and Smith 2005), with several explanations having been offered to account for the order. Adopting the view that such an implicational scale imposes a relative orderliness on dialect variation by limiting the number of lects in a community, Chambers and Trudgill (1998) speculate that the reason for the most common order that has emerged in studies of different dialects is that there is not overtly marked for number, and thus it is the subject-type that occurs most frequently with was in plural contexts, you was is common due to the forces of analogy imposed by I was and it was, and the last three subject-types occur in the order they do because “the saliency of the plurality increases from we to NPpl to they” (133). Focusing on the relative frequency of was in plural existential-there constructions, Chambers (2006) contends that because the thematic subject of existential constructions is postverbal, a costly ‘look-ahead’ mechanism would have to be invoked to trigger agreement between the verb and the subject. Others (e.g. Cheshire 1999; Crawford 2005; Eisikovits 1991) maintain that the prevalence of was in such constructions reflects a process in

---

1 However, because there are many languages in which this kind of leveling is not found, Kortman and Szmrecsanyi (2004) argue that default singulars should be considered “angloversals” rather than universals. Trudgill (2008) shows that this feature does not even hold for all Germanic languages and presents evidence against viewing this phenomenon as a default process.
which *there was* has become lexicalized as a way of introducing new topics into discourse; Cheshire and Fox (2009: 13-14) point out, however, that explanations accounting for the pervasive use of nonstandard *was* in existential constructions as a failure of a look-ahead mechanism or as the result of lexicalization are not necessarily mutually exclusive. Additionally, Kortmann and Haser (2009) contend that the higher discourse frequency of *they* relative to other subject-types means that *they were* is more entrenched in speech and is therefore less susceptible to *was/were* variation than other subject-types are.

Despite evidence of a basic ordering of constraints, as well as explanations accounting for this order, several studies of *was/were* variation have revealed speech communities with different orderings along this scale. For instance, while most work shows existential constructions to be the most likely among the five subject-types to implement nonstandard *was*, even those varieties for which the use of nonstandard *was* is nearly nonexistent (e.g. Britain and Sudbury 2002; Hay and Schreier 2004; Khan 2006; Moore 2003; Tagliamonte, 1998; Cheshire 1999; Walker 2007), many varieties exhibit slightly higher rates of *you was* than *there was* (Cheshire and Fox 2009: 12). Data collected on other varieties suggest that while the ordering of *was* after existential *there* and *you* is relatively stable, there is a great deal of variation concerning the order of the other three subject-types in that some scales end with NP plural > *we/they* and others with *we > NP plural > they* (Cheshire and Fox 2009: 11).

From studies on variation in British English, scholars have inferred that nonstandard *was* generally operates according to one of two rules in the British Isles: 1) a so-called Northern Subject Rule, in which the use of nonstandard *was* occurs more frequently after plural NPs than after pronominal subjects (Britisht 00200; and 2) a so-called Southern Subject Rule, also referred to in the literature as the East Anglian Subject Rule (British2002; Brittan and Rupp 2005), according to which *was* occurs more frequently after pronominal subjects than after plural NPs. A variation of these two rules focuses specifically on the alternating order of third-person plural NPs and third-person pronouns in different varieties of English (Cheshire and Fox 2009: 12), with the most extreme example of a variety in which *was* occurs with NP plurals more often that with *they* being the variety of English spoken in Buckie, Scotland, where *they was* is unattested (Smith and Tagliamonte 1998; Adger and Smith 2005). In addition to these fluctuating patterns, Levey (2007) found that in the Bergen Corpus of London Teenage Language (COLT) *was* occurs with *they* and plural NPs at roughly the same rate. In a study of *was/were* variation in 13 different communities, Tagliamonte (2009) found that *was*-leveling occurred in existential contexts in most communities and that it was found with plural NPs more often than with *they*; however, beyond that she observed no regular relationship between nonstandard *was* and different subject-types. Such a range of findings suggests there is still much to be learned about *was/were* variation in English.

The speech of the American West, and the Rocky Mountains in particular, has generally been absent from discussions of *was/were* variation. One of the reasons for this is the paucity of data collected on syntactic variation in the West, as the linguistic surveys conducted in the region have generally focused on phonetics (e.g. Labov et al. 2006) or the lexicon (e.g. the Dictionary of American Regional English and various Linguistic Atlas projects). Among studies in the latter group, the Linguistic Atlas of Colorado (see Kimmerle, McDavid and McDavid 1951) investigated syntactic variation to some degree but, in the spirit of traditional dialectology, placed greater value on phonetic and lexical variation for determining social and regional boundaries. Collecting syntactic variants through Atlas fieldwork also posed methodological concerns, a crucial one being the dubious nature of syntactic data that is directly elicited (see, for
example, Labov 1971) and another being the effect that such questioning has on interviewing, which Pederson (1996a: 53) addressed in his creation of the LAWS worksheets:

Unlike the traditional atlas questionnaire, this tool gives no direct attention to morphological or syntactic targets. Such interrogation may yield information about the selection of function words and the inflections of speech parts, but in the process it can also irreparably damage otherwise relaxed conversation. For that reason, the worksheets aim to carry the interview forward in expectation of gathering syntactic data through relaxed discourse.

Such a strategy could not be adopted in earlier Atlas work as, in the absence of lightweight electronic recorders at the time of data collection, fieldworkers recorded their observations by hand as numbered entries in notebooks, a difficult if not impossible task for collecting and organizing morphosyntactic data on-the-fly. As Pederson (1993: 38) noted directly in implementing audio recording for his earlier LAGS project, “The text/tape yields more free-conversation information than the ablest fieldworker could possibly gather.” LAWS methods continue in the LAGS tradition by treating the audio recording of the interview as the primary field record, thus creating the opportunity to analyze records collected for dialectology using the tools of corpus linguistics (see, for instance, Anderwald and Szmidraczy 2009).

Although Hamilton-Brehm (2003) and Antieau (2003, 2006) use LAWS methods to investigate syntactic variation in El Paso, Texas, and rural Colorado, respectively, this paper is the first to focus specifically on the issue of was/were variation in the LAWS corpus, by concentrating on its distribution in records collected for the LAMR subcomponent in the states of Colorado, Utah, and Wyoming. The main objective of this study is to describe sociolinguistic aspects of was/were variation in rural communities in the middle Rocky Mountain region and to analyze these findings in light of previous research. As such, this study will address how the patterns of was/were variation attested in the LAMR corpus compare to the results of work done on was/were alternations in other varieties of English. Additionally, it will consider whether these differences might be the product of methodological disparities rather than dialectal differences. Finally, the paper addresses some future directions for this research.

3. Methods
LAWS methods have been described exhaustively elsewhere (e.g. Pederson and Madsen 1989; Pederson 1990, 1996b; Hamilton-Brehm 2003; Antieau 2006); in addition, some papers have described specific aspects of the methodology (e.g. Pederson 1996a; Barry and Antieau 2001). For this study, it is worth summarizing the general aims of the project.

In many ways, LAWS guidelines follow from the same deductive approach employed in earlier Atlas projects (Pederson 1995): prior to fieldwork, a region is identified as worthy of study, a questionnaire is compiled for the project, a grid for conducting fieldwork in the region is established, and a community (or communities) within each grid unit is recognized as having the potential for investigation. Upon entering a target community, the fieldworker must find a suitable informant, i.e. someone who was born or lived most of his or her life in the community and will agree to a three-hour, tape-recorded interview covering facets of language and culture in their community, and, in keeping with traditional Atlas methods, is typically elderly. Upon completion of the interview, the field record is submitted to the Atlas office at the University of
Georgia for processing, which includes digitization and transcription in standard orthography so that it can be analyzed using the corpus tools.

To date, LAWS interviews have been conducted in California, Texas, Colorado, Utah and Wyoming, but in terms of fieldwork, transcription and analysis, it is the latter three states that have received the greatest attention toward a subset of the LAWS corpus called the Linguistic Atlas of the Middle Rockies (LAMR). At the time of this study, a total of 70 interviews conducted in the middle Rocky Mountain states between 1989 and 2004 have been transcribed in their entirety, with 56 classified as primary interviews and 14 as secondary, secondary interviews being those with audio difficulties or notable gaps in the interviewing and in grid units where at least one other interview had been conducted. Differences in the number of informants for each state reflect differences in population, which were accounted for during the initial preparation of grid creation for LAWS (Pederson 1990); as of this writing, only a portion of the 22 grid units proposed units for Utah have been covered, for a total of 17 interviews in Utah (13 primary, 4 secondary), 38 in Colorado (28 primary, 10 secondary), and 15 in Wyoming (all primary). All interviews in the collection were used in this study; however, an interview’s status as secondary was noted when this might have been the cause of any problems or aberrations in the data.

In order to facilitate statistical analysis testing the effects of location, sex, education and time on was/were variation in the LAMR data, informants were placed into several groups along four dimensions: 1) sex of informant; 2) timeframe of interview; 3) education level of informant; and 4) state of residence. For sex of informant, informants were almost evenly split between males and females with 36 of the former and 34 of the latter. As part of the interview, informants self-reported their education level with responses ranging from 6th grade to college graduate, and informants were placed into one of four groups based on these reports: 1) did not finish high school (n=22); 2) graduated high school but received no further formal education (n=25); 3) attended college or business school (n = 20); and 4) unknown (n=3), the latter being omitted from statistical analyses regarding education. To account for a 10-year gap between the end of the first round of interviewing and the beginning of the second round, informants were placed into one of two groups based on the timeframe during which they were interviewed: 1) 1989 to 1991 (n = 49), and 2) 2001 to 2004 (n = 21); this testing served as a general way to investigate the effects of time of interview, birth year of informant, and fieldworker effect, since no fieldworker conducted interviews in both timeframes. Finally, the state the informant lived in was tested with informants being from Colorado (38), Utah (17), and Wyoming (15). See Appendix A for a list of the informants used in this study by community with the relevant social characteristics of each informant.

In lieu of hand-coding, data analysis relied on a new tool called KwicKwic to extract KWICs from interview transcripts using appropriate queries. The five subject-types presented in the implicational scale presented by Chambers and Trudgill (1998) were investigated; specifically, searches were conducted using the following four queries: there /6 was, you /6 was, we /6 was, and they /6 was, where “/6” means ‘within three words of.’ The search for full NP plurals preceding the copula was required several search strategies but remained consistent with the search for target items within 6 words of was.

---

2 As such, it should be noted that the LAWS corpus is a dynamic corpus, not only in that future interviews conducted in unexplored grid units will be added to the corpus, but in that primary interviews may be reclassified as secondary if found to be unsuitable during transcription, provided that a higher-quality interview can be located for that grid unit.

3 Developed by Clayton Darwin and available at [http://www.kwickwic.com](http://www.kwickwic.com)
4. Results
In this section, I describe the distribution of was in the LAMR corpus with respect to the five subject-types generally referred to in the literature on was/were variation (viz. as a link between existential there and a plural noun phrase, and after you, we, full plural NPs, and they). Then, I present the results of statistical analysis investigating the use of nonstandard was with these five subject-types and several social variables (viz. education level and sex of informant, and timeframe of interview).

4.1 Linguistic Distribution
In the LAMR corpus, was appears after all five of the subject-types investigated here, with examples from the corpus presented below:

(1) Third-person plural pronoun they
a. They was. They was going to burn it to the ground… (Mountain View, WY)
b. They was born right there on the ranch. (Upton, WY)
c. Well, I guess they did. They was sure a-throwing us around, you know. And then the uncles they was giving us encouragement, you know. “Go in and get her.” “Hell, we can’t, you know. We can’t.” You know, they brought it right on the front porch. They was throwing us off the porch. (Grantsville, UT)
d. No. I didn’t have to whip my kids. They was pretty good. (Manti, UT)
e. Well, they was supposed to have come over on the Mayflower… (Del Norte, CO)

(2) Full NPs
a. …the Indians was the underdog… (Alva, WY)
b. …a lot of parents was living on forty-four dollars… (Grantsville, UT)
c. Almost all of the European countries was in through here. (Blackhawk, CO)
d. …the big rocks was dropped… (Manti, UT)
e. …of course the fryers was what we raised to eat… (Buena Vista, CO)

(3) First-person plural pronoun we
a. …we was short on money, being homesteaders… (Douglas, WY)
b. We was all healthy, every one of us… (Farson, WY)
c. We was married in Provo at the courthouse. (Springville, UT)
d. Well, we was supposed to be, but I fooled them. (Del Norte, CO)
e. We was married in Pueblo. (Gardner, CO)

(4) Second-person pronoun you
a. Post office. Oh, you was at the library… (Clearmont, WY)
b. Now, if you was a cowboy, you'd wear chaps… (Douglas, WY)
c. …if you was lucky enough to have a two-holer that was. (Grantsville, UT)
d. …whether you was out on the trail or whether you was home… (Del Norte, CO)
e. My mother could get you out of prison if you was staying there… (Gardner, CO)

4 Informants in this study are referred to by the names of the communities they represent, which appear in parentheses following linguistic examples.
(5) Existential there
   a. There was as many as seventeen pupils… (Clearmont, WY)
   b. There was places that they did, all right. (Alva, WY)
   c. …oh hell there was two or three depending on if… (Grantsville, UT)
   d. But they, there was a few bootleggers but there were no big operations. (Manti, UT)
   e. There was a few places in Beulah that did have. (Beulah, CO)
   f. There was no bridges and we crossed the river on a ferry boat… (Duchesne, UT)
   g. … but there was no eaves troughs on this one… (Blackhawk, CO)
   h. There was no legs under it. (Hygiene, CO)
   i. There was no idle moments (Dove Creek, CO)
   j. …because there was no sidewalks or nothing… (Alamosa, CO)
   k. …there wasn’t schools… (Meeteetsee, WY)
   l. There wasn’t any great bands of wild horses. (Clearmont, WY)

Unlike in other studies, such as Cheshire and Fox (2009), Nevalainen (2006), and Schilling-Estes and Wolfram (1994), polarity was not taken into account for this study; rather, constructions in which the NP was negated, either via a full negative form (5f-j) or a cliticized form (5k-l), were collapsed with (5a-e) into a single category, leaving the issue of whether polarity has any bearing on the use of was in plural contexts in the LAMR corpus to future research.

Some utterances that mix subject-types in double nominative constructions were also found, as in the following:

(6) …so all the nephews they was going to go steal Rosemarie. (Grantsville, UT)

Such instances were counted as instances of the subject-type appearing closest to was in the utterance.

Several general observations can be readily drawn from the data. First, there is evidence in the corpus of was/were variation for each of the subject-types investigated in this study, and only 5 of the 70 informants investigated here did not use was with any of the subject-types that were tested (viz. informants in Salt Lake City, UT, and Georgetown, Longmont, Meeker, and Walden, CO). The remaining 65 informants used was with at least one of the five subject-types, with 13 informants using was at least once with all five subject-types (viz. those in Douglas, Farson, Spotted Horse, and Upton, Wyoming; Grantsville, Maeser, and Manti, Utah; and Del Norte, Florissant, Kremmling, Idalia, Lamar, and Springfield, Colorado).

Of the 65 informants who used was with at least one of the subject-types, only a single informant used it invariantly in all the instances in which past tense BE appeared: the secondary informant from Brush, CO, who used it in one instance of you was and one instance of we was. Aside from this informant and the five who never used was in the tested environments, individual informants alternated between the use of was and were in targeted contexts over the course of their respective interviews, at times using both variants in close proximity to one another. Thus, for nearly all speakers using was in contexts in which was or were could be used was not an either-or proposition, but rather, their choices varied with different subject-types and even at different points in their respective interviews.

Additionally, the ratios of was and were use in plural contexts could be quite different depending on subject-type, as shown in Figure 1:
There was were There You We NPs They
were
was

Figure 1. Proportion of was/were according to subject-type

Figure 1 shows that was is used with existential-there and plural NP subjects in approximately 61% of all constructions in the corpus comprising existential-there + past tense BE + plural NPs (364/597); however, the percentages for the four remaining subject-types drop sharply: you was accounts for 41% of all instances of you + past tense BE (67/162); we was for 23% of the total number of we + past tense BE (107/473); plural NPs + was for 21% of the total number of plural NPs + past tense BE constructions (111/511); and they was for 12% of the total number of they + past tense BE in the corpus (180/1442). These numbers would suggest that the use of was in plural existential-there constructions is generally acceptable among LAMR speakers, particularly when compared to its use with other subject-types. At the other end of the scale, they was is a relatively small proportion of they + past tense BE constructions; however, the raw number of they was in the corpus is greater than the raw number of uses of we was or was with full NP subjects. The percentage of you was is significantly higher than it is in the other pronoun combinations, we was and they was; however, as can be noted in this figure, the total number of times that LAMR informants use you + past tense BE is relatively low (n=162) compared to their use of past tense BE with other subject-types.

In addition to the informant mentioned above who invariantly used was in her limited use of past tense BE in the contexts investigated in this study, there were several informants who only used was and never were with specific subject-types. With respect to plural existential-there constructions, 16 informants used only there was and never there were, with one informant using there was a total of 19 times over the course of the interview; 16 informants produced a combined total of 33 instances of you was without ever using you were; 5 speakers together produced 11 instances of we was without using we were; 1 speaker used was with 2 plural NP subjects without using were in the same context; and finally, one speaker used they was 10 times without ever using they were.

Another way of making sense of the data on was/were variation extracted from the LAMR corpus is to characterize a speaker as a user of was with a specific subject-type if he or she used that combination at least one time during the interview. The total number of speakers for each subject-type + was is provided in Figure 2:
Of the 65 informants who used was with at least one of the subject-types that were tested, 63 used it to link existential-there and an NP plural, 30 informants with you, 33 with we, 38 after NP plurals, and 33 with they. Figure 2 shows that nearly twice the number of speakers used was in plural existential-there constructions than with the next most common subject-type, and, coupled with the findings presented in Figure 1, suggests the use of was in plural existential constructions to be an acceptable construction for most LAMR speakers. Even without existential constructions, however, 52 LAMR informants used was with at least one subject-type. Finally, the issue of an implicational scale governing the use of was in the LAMR corpus was investigated; the findings are presented in a table similar to the one presented by Chambers and Trudgill (1998: 143) below:

<table>
<thead>
<tr>
<th></th>
<th>they</th>
<th>NPpl</th>
<th>we</th>
<th>you</th>
<th>there</th>
<th>Total no. of speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Lect 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>13</td>
</tr>
<tr>
<td>Lect 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>3</td>
</tr>
<tr>
<td>Lect 4</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>0</td>
</tr>
<tr>
<td>Lect 5</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>4</td>
</tr>
<tr>
<td>Lect 6</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 2: Scalogram of five subject-types in LAMR corpus indicating absence (0) or presence (+) of was for each lect
Table 2 presents a scalogram depicting the production of *was* with five subject-types in the LAMR corpus as implicational in six different lects. The total number of speakers accounted for by this scalogram is 37, or just over half of the LAMR informants investigated in this study; there are a total of 17 lects. However, the figures here are based solely on production and do not take into account those speakers who never used combinations of specific subject-types with past tense BE and, therefore, could not be expected to use subject-type + *was*. The table below accounts for these speakers by omitting 31 informants with either no data for a specific subject-type (n=22) or with insufficient data (i.e. only one use of a given subject-type; n=9).

<table>
<thead>
<tr>
<th></th>
<th>they</th>
<th>NPpl</th>
<th>we</th>
<th>you</th>
<th>there</th>
<th>Total no. of speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Lect 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>5</td>
</tr>
<tr>
<td>Lect 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>3</td>
</tr>
<tr>
<td>Lect 4</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>0</td>
</tr>
<tr>
<td>Lect 5</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>4</td>
</tr>
<tr>
<td>Lect 6</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>13</td>
</tr>
</tbody>
</table>

**Table 3:** Scalogram of five subject-types in the LAMR amended corpus, indicating absence (0) or presence (+) of *was* for each lect

Despite the omission of 31 informants from the analysis with incomplete or insufficient data for one or more subject-types, the table only accounts for 23 speakers. The most effective ordering of subject-types is presented in Table 4 below:

<table>
<thead>
<tr>
<th></th>
<th>they</th>
<th>we</th>
<th>you</th>
<th>NPpl</th>
<th>there</th>
<th>Total no. of speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Lect 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>5</td>
</tr>
<tr>
<td>Lect 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>2</td>
</tr>
<tr>
<td>Lect 4</td>
<td>0</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>2</td>
</tr>
<tr>
<td>Lect 5</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>4</td>
</tr>
<tr>
<td>Lect 6</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>13</td>
</tr>
</tbody>
</table>

**Table 4:** Scalogram of five subject-types in the LAMR amended corpus in the most effective order

Treating the data in this way accounts for 26 speakers, but leaves 13 speakers unaccounted for and results in a total of 12 lects, despite omitting 31 informants from the analysis. These details suggest that implicational models are not truly adept at capturing the nature of *was/were* variation in the LAMR corpus and that an alternative model should be investigated in future research.

**4.2 Social distribution**

The relationship between the use of *was* with each of the five subject-types and several social characteristics was investigated. The four social variables tested were: 1) sex of informant; 2) timeframe of interview; 3) education level of informant; and 4) informant’s state of residence. The link between these social variables, or closely related ones, and use of *was* in the contexts
investigated in this paper has been tested in other studies, e.g. Cheshire and Fox (2009), Tagliamonte (1998) and Feagin (1979).

Below, I present distributional patterns of usage in which speakers are represented categorically as users of subject-type + was if they used the construction at least once during the course of their interviews; percentages of all the speakers of each group who used the construction are presented in the graph. As in Table 4 above, these figures omit informants who never used a specific subject-type + BE from the analysis before the percentage was calculated:

![Figure 3: Percentages of speakers of was by subject-type and sex](image1)

![Figure 4: Percentages of speakers of was by subject-type and timeframe](image2)
Several trends appear in these data, both in general terms and with respect to specific social variables. First, the figures show that higher percentages of speakers from all social groups use *was* in existential-*there* constructions than with any other subject-types, which is not surprising given the use of *was* in plural existential constructions by nearly all of the speakers in the LAMR corpus. The figures also show a fairly even distribution of *was* used with other subject types, once speakers whose data was incomplete for that subject-type are omitted from the analysis.

Figures 3 and 4 have the most clear-cut patterns illustrated in all these figures, with the former showing that more males than females used *was* for each of the subject-types, and the latter that a higher percentage of informants in Timeframe A used *was* with each subject-type. Chi-square
testing shows a significant correlation between the use of *you was* and the sex of the informant at \( p < .05 \).

Although not as distinctive as in Figures 3 and 4, Figures 5 and 6 also highlight some patterns in the data. Figure 5 shows a tendency for higher use of *was* by the group with the least amount of formal education in the corpus, viz. informants who did not finish high school, with a greater number of users of *was* with every subject-type except existential-*there*. While informants at the middle education level and at the highest level of education alternate in higher uses of *was* depending on the subject type, the percentage of speakers with the highest level of formal education never uses *was* higher than the lowest educational group. Although the rate of *was* in existential contexts was slightly lower for the informants with the lowest education level than it was for those in the middle education group (high school graduates), it was higher for the lowest level in all other contexts, particularly for *we was* and *they was*, and was always higher for the low education group than for the highest education group, although no statistical significance was found using chi-square on individual subject-types. With respect to state, a lower percentage of Colorado informants rather than other informants used *was* in every context, and Wyoming was the highest-ranking state for each subject-type except *they*, in which the percentage of Utah speakers using *was* was slightly greater than it was for Wyoming. It should be noted that the performance of Colorado might in part echo the lower performance of Timeframe B with respect to *was* production illustrated in Figure 4, as all Timeframe B speakers were Colorado informants, comprising just over half of the state’s informants.

5. Discussion

Several findings emerged from this study, both at the local level in what it says about middle Rocky Mountain English and data collected via LAWS methods and, at a more global level, in the contribution it makes to ongoing discussion of *was/were* variation in English. First, there is ample evidence of *was/were* variation in the interviews, which either contradicts the popular perception of English spoken in the western states as simply being general American English or makes a statement about the pervasiveness of *was/were* variation in general American English. This finding also supports the position of Pederson (1993, 1996a) that morphosyntactic data can be collected through relaxed discourse but that audio-recordings rather than handwritten transcription in the field are vital to this undertaking. This is not to say, however, that study of this phenomenon would not benefit from additional methods, such as written or spoken surveys concerning grammaticality judgments or interview modules targeting specific kinds of discourse that might be more conducive to such variation, but it would certainly seem that in light of this study, data gathered via LAWS methods provide an excellent start to the investigation of *was/were* variation in the middle Rocky Mountains.

To some extent, these data support findings from earlier studies on *was/were* variation and their use with a range of subject-types. Foremost among these is the finding that the use of nonstandard *was* in plural existential-*there* constructions is pervasive in the speech of the informants investigated here, and its frequency in discourse and among speakers was apparent in every aspect of the study. Nonstandard *was* was used by over 90% of the speakers in the corpus in these constructions, even those speakers who did not use nonstandard *was* with any of the other subject-types that were investigated; its use was not restricted to informants based on membership in any of the social groups that were investigated; existential constructions presented the highest ratio of *was* usage to *were* usage among subject-types at 62%; and 15 informants only used *was* and never *were* in plural existential constructions. These findings
suggest that the use of *was* in plural existential constructions has some acceptability among informants that might not be shared with other subject-types. They also support the view that the use of nonstandard *was* after existential *there* deserves special consideration among these subject-types, reflecting, for instance, the failure of a ‘look-ahead’ mechanism (as proposed by Chambers 2006) and/or a process of lexicalization used to produce more-or-less fixed expressions for introducing information into discourse (as proposed by, e.g. Cheshire 1999; Crawford 2005; Eisikovits 1991) not shared by other contexts.

Some apparent differences between the pattern of *was/were* variation that is depicted for Rocky Mountain English here and that has been depicted for other varieties of English by other studies also surfaced in this study, however, namely in the low relative frequency of *you was*, the high relative frequency of *they was*, and the concept of an implicational scale of subject-types. Perhaps the status of *you was* is the most surprising among these, given its high relative frequency in other studies, sometimes even to the point of exceeding rates of usage of *there was* among informants (as reported in Cheshire and Fox 2009: 12). In the LAMR corpus, with the exception of those constructions headed by plural NPs, *you was* is used less frequently than any other subject-type + *was* combination overall and by fewer informants (as shown in Figures 1 and 2, respectively). However, Figure 1 also shows that the overall usage of *you + past tense BE* in the corpus is less than half that of any of the other subject-type + past tense BE; furthermore, 14 informants never used *you + past tense BE* at all, whereas the number of informants not using *there, we, plural NPs, and they + past tense BE* was significantly lower, at 1, 3, 3, and 1, respectively. Finally, as represented in Figure 1, the percentage of *you was* for all instances of *you + past tense BE* (42%), while much lower than that of *there was* for *there + past tense BE* (62%), is more than double the percentage for any other subject-type, and this difference is also apparent in Figures 3 through 6, which reflect the percentages of speakers in social groups using *was* with various subject-types. Taken together, these data suggest that the subject matter of Atlas interviews and the types of discourse elicited during these interviews may not be as conducive to *you + past tense BE* as sociolinguistic interviews are. The typical interaction of a fieldworker and a single informant in Atlas-style interviewing in which the former is clearly the initiator of questions and the latter the respondent as opposed to some sociolinguistic interviewing in which these roles are more negotiable, in which interview situations often include groups of family members and friends, and in which fieldworkers are sometimes even related to informants, might very well account for this difference and will be the subject of future research.

The relative frequency of *they was* is also higher in this study than some other studies on *was/were* variation. In addition to cases in the corpus in which *they* has a clear group of referents, there also seems to be a crossover effect in cases in which *there* in existential constructions is phonetically realized as *they*, a phenomenon that has received relatively little attention in the literature on *was/were* variation, and for which several examples from the corpus are presented below:


(7)  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>I think <em>they was</em> two bedrooms upstairs. (Delta, CO)</td>
</tr>
<tr>
<td>b.</td>
<td>…they claim that <em>they was</em> four trains a day coming in here… (Lake City, CO)</td>
</tr>
<tr>
<td>c.</td>
<td>…before they closed that <em>they was</em> one at Grand Junction. (Lake City, CO)</td>
</tr>
<tr>
<td>d.</td>
<td><em>They was</em> some that was muckers and some were hoist men… (Black Hawk, CO)</td>
</tr>
<tr>
<td>e.</td>
<td>The only people <em>they was</em> were a few miners and trappers… (Walden, CO)</td>
</tr>
</tbody>
</table>
The possibility of a crossover effect from existential-there constructions to they was will be investigated in further research.

The major difference between the findings of this study and several other studies that have investigated was/were variation in speech communities, however, is in the amount of support for the idea that the choice of past tense BE is governed by subject-type. While a weak version garners some support from the apparent association of was/were use with each subject-type as presented in the ratios in Figure 1, as well as the prevalence of existential-there + was in the LAMR data, the idea that there is an implicational scale at work is not borne out by data on was use with each subject-type for each informant. When the production of the LAMR informants was mapped using the limited number of lects presented in Table 2, following Chambers and Trudgill (1998), only half the LAMR informants were accounted for. Even when the data was modified for those speakers who did not use specific subject-types + BE in their respective interviews, and thus did not have the opportunity to use those subject-types + was, as shown in Table 4, 15 speakers were left unaccounted for, and a total of 12 lects were attested. As such, the results of this study are more in line with Tagliamonte’s (2009) work on was/were variation in 13 communities that showed that was-leveling was pervasive in existential contexts throughout the survey, but no regular relationship between was and other subject-types. In fact, together with the work of Tagliamonte, the current work suggests that while implicational scales might hold true for the small, and often high-density, speech communities that are often the focus of sociolinguistic analyses, they do not hold up well for work done over larger regions, due perhaps to subtle differences in the frequencies and ordering of subject-types among speech communities located several hundred miles apart and even among different social groups and individual speakers.

As a study using the tools of corpus linguistics to analyze interviews conducted for dialectology, however, this investigation is limited to data collected via direct elicitation and in passages of discourse occurring during interviewing, which may not reflect all the grammatical structures available to informants. Additional study on the grammatical judgments of speakers pertaining to was/were variation and more study of type-token ratios in the LAMR data might lead to a more complete representation of this phenomenon in Rocky Mountain speech.

6. Conclusion

This paper relies on data collected as part of the Linguistic Atlas of the Middle Rockies to open the book on the investigation of was/were variation in the Rocky Mountain English. While some of these data suggest that this variation operates under the same general rules as other dialects of English do (e.g. the pervasiveness of nonstandard was in plural existential constructions), there is also evidence that Rocky Mountain English differs from some varieties in the use of they was, and the low relative frequency of you was compared to sociolinguistic studies suggests that methodological differences between Atlas-style interviewing and sociolinguistic-style interviewing might need to be accounted for when comparing between the two sets of data. There is also little evidence that the kind of implicational scales that have been applied successfully to patterns of was/were variation in other studies have the ability to deal effectively with the broad regional patterns exhibited in Atlas-style data or if they are instead limited to more local studies at the level of a single community. Although this study has shown the LAMR corpus to be useful for studying was/were variation at a rudimentary level, only further study will inform us if it will be useful for answering more sophisticated questions about this widespread phenomenon.
References


63
Tagliamonte, Sali (2009). There *was* universals, then there *weren’t*: a comparative sociolinguistic perspective on ‘default singulars’. In Markku Fillpula, Heli Paulasto, and Juhani Klemola (eds.), *Vernacular universals versus contact-induced change*. Routledge, Oxford. 103-129.
Tagliamonte, Sali, and Jennifer Smith (1999). Analogical levelling in Samaná English: the case of *was* and *were*. *Journal of English Linguistics* 27: 8-26.
Author contact information:

Lamont Antieu: lamont@antieu.org