

21. Lexical and Grammatical Maps

ANAE is a phonological atlas, concerned with the geographic distribution of the sound systems of North American English. Information on the distribution of particular words, and the incidence of phonemes in those words, can be obtained from LANE, LAMSAS, LAGS, LAUM, and DARE. The Telsur interview did inquire into a small number of grammatical variables, and several vocabulary items, as a way of correlating ANAE findings with these other studies. This chapter will present maps of four such items and their relation to the dialect boundaries drawn in previous chapters.

21.1. Terms for ‘carbonated beverage’

The ANAE interview schedule contained several lexical questions. The first is: *What’s the general term you use for a carbonated beverage in your area?* Five terms with specific geographic patterns are displayed in Map 21.1: *soda*, *pop*, *coke*, *tonic*, and *soft drink*. When a subject gave more than one answer, the colored token on the map shows the more common response.

The dominant form used in the northeastern area is *soda*. The *soda* territory outlined in Map 21.1 is considerably larger than any previous view of the Northeast: it includes all of New York State except for the western end, the Mid-Atlantic states, and the Upper South, extending southward to include eastern North Carolina.

Soda is also heavily concentrated in an area centered on St. Louis, which is distinct from most Midland areas in its phonological patterns as well (Chapter 19). The St. Louis area extends northeastward to the lower part of the St. Louis corridor, and westward across Missouri to St. Joseph. Here however we do not see a St. Louis connection with the Inland North usage, which is dominated by *pop*, but rather with a Mid-Atlantic–Northeastern term.

A third *soda* area is located in the southwestern portion of the West, including communities in Arizona, Utah, Nevada, and California. The two large cities of California – San Francisco and Los Angeles – are not included, since they show a mixed pattern in which *soda* does not predominate.

Florida also shows a concentration of *soda* tokens, but since the communities are evenly divided between *soda* and *coke*, it is not identified as a *soda* area.

The South is the center of *coke* territory. The *coke* isogloss does not extend to the Virginia and eastern North Carolina, though there are four red symbols within that area; there is overlap with a slightly dominant use of *soda*. In Indiana, there is a striking northward extension of *coke* to include the Hoosier apex, with a strong presence of *coke* in Indianapolis.¹ The *coke* domain extends westward, beyond the border of the phonological South, to include New Mexico and Tucson, Arizona. A scattering of red symbols can be seen further westward, within the blue *soda* area in the West.

The most coherent geographical area is enclosed in the green isogloss, delimiting the speakers who use *pop* as their general term. It includes the North (except for the *soda* areas in New York State and southeastern Wisconsin), the Midland (including Pittsburgh), almost all of Canada (excepting Montreal and Winnipeg) and the Pacific Northwest.² In the Great Lakes region there is a notable scattering of the blue symbols that mark *soda*, but they are a majority only in the Milwaukee area.



The term *tonic* is well known to be characteristic of the Boston area, but it does not predominate in any ENE city outside of Boston. It is also used by the two Telsur speakers in San Antonio.

Two minor terms in the South show a notable local concentration. Seven Telsur speakers responded *cold drink*. They are found in a narrowly delimited south central region: three in New Orleans, three in Dallas, and one in Houston. Although this term may seem to be a general description and not on the lexical level of *soda*, *pop* etc., its geographic concentration in the area of New Orleans suggests that it is a local equivalent.

The term *soft drink* might also seem to be a periphrasis that is generally available to all speakers, but it occurs with notable frequency in two Southern cities: New Orleans and Atlanta. The New Orleans Telsur data includes more speakers than those shown on Map 21.1. The totals are: *soft drink* 6, *soda* 3, *coke* 1, *cold drink* 3.

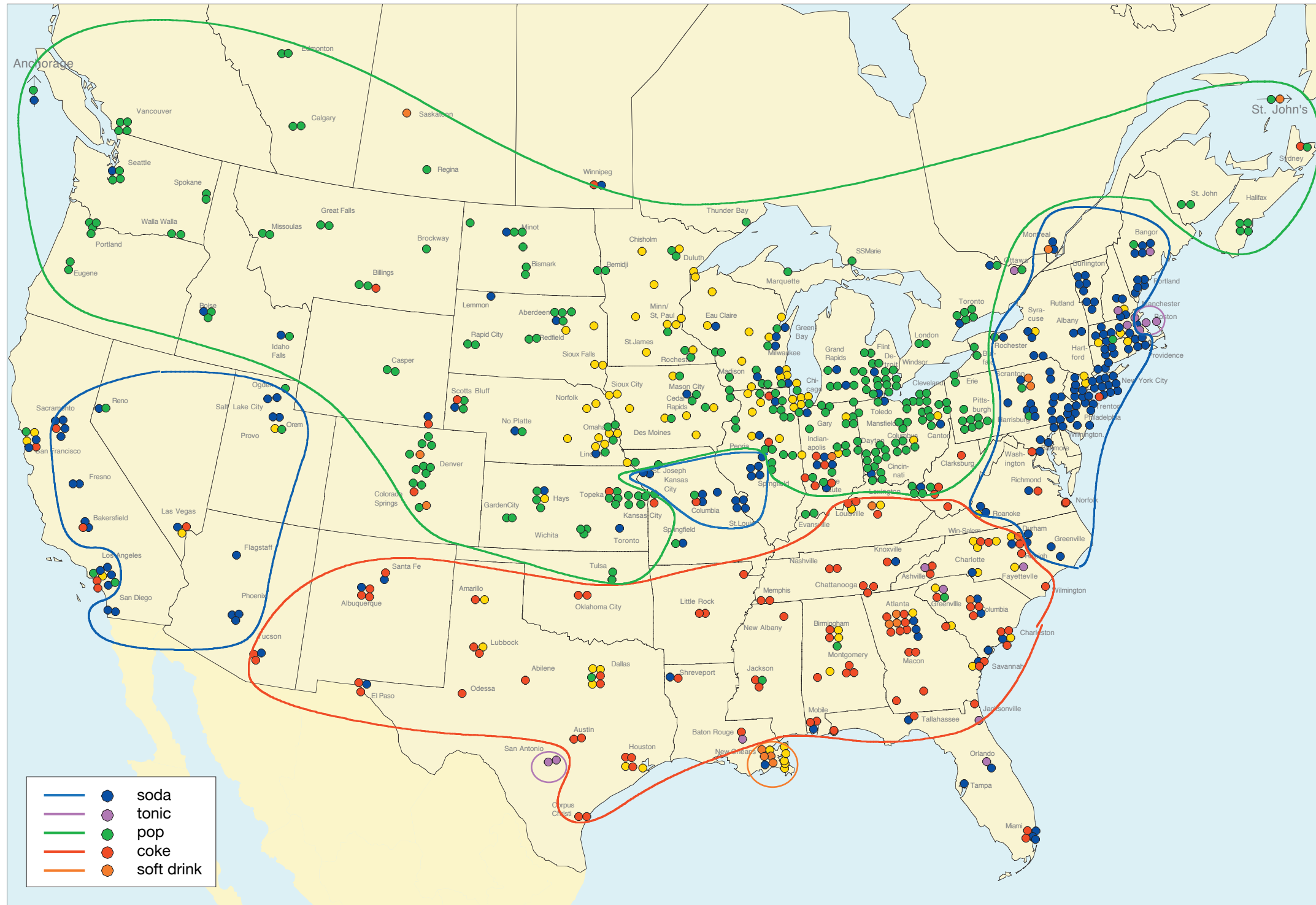
Terms for carbonated beverage show a marked tendency to differentiate African-American speakers from others. In New Orleans, the three users of *cold drink* are all African-American. In Atlanta, three of the four African-American speakers use *soda* in preference to *coke* or *soft drink*. In Columbia, two of three African-Americans show the same preference for *soda*.

The clear-cut regional preferences for ‘carbonated beverage’ are not unrelated to the ANAE boundaries of Map 11.15. The South is delineated by *coke* with an expansion in the east–west dimension, while the Ohio River boundary between Midland and South is preserved. St. Louis is recognized as a distinct region. The Northeast is a coherent unit, though embedded in a larger *soda* area. Canada is unified with a few exceptions. In other respects, however, the lexical boundaries run counter to the phonological boundaries. The North–South boundary between *soda* and *pop* is orthogonal to the isoglosses that separate North from Midland and Canada from the North, and the West is divided into northern and southern components in a fashion quite distinct from anything seen in previous chapters.

The parameters of the three major ‘carbonated beverage’ isoglosses are shown in Table 21.1. The dominant forms are *soda* and *pop*, which account for 83 percent of the data. The most widespread term, *soda*, shows a high degree of homogeneity for the three isoglosses of Map 21.1, a value of .81. Neither of the other two terms approaches this value, since *soda* is a competitor in their regions of geographic concentration. For the same reason, *pop* and *coke* show high consistency, since they are geographically limited in the way that *soda* is not. Leakage values show a parallel pattern: *pop* and *coke* are very low, while *soda* is remarkably high. These figures jointly indicate that *pop* and *coke*, though very widely used, are regional terms in the sense that *soda* is not.

1 For reasons noted in Chapter 9 (Figure 9.3), a larger number of Indianapolis subjects were interviewed than for most cities. The distribution of responses for ‘carbonated beverage’ were: *coke* 8, *soda* 5, *pop* 2, *soft drink* 1. Indiana cities south of Indianapolis show a mixed pattern, with about 50 percent representation of *coke*.

2 Two out of the three Telsur subjects in Montreal used *soda*. However, much larger amounts of data on Canadian English reported in Boberg (2004, 2005) indicate that it is *soft drink*, rather than *soda*, that provides the major exception to the general Canadian term *pop* in both Montreal and Winnipeg, as well as in Newfoundland (Boberg 2004, 2005)



Map 21.1. Geographic distribution of terms for 'carbonated beverage'

North America is sharply divided into regions by the general term for a carbonated beverage. *Soda* is used in the northeast, including the Mid-Atlantic States, and in a large southwestern area. *Coke* dominates the South, and extends much further westward than the phonological definition of the South. But *pop* is geo-

graphically the dominant term, extending over the Midland, the North, Canada, and the northwest. None of these boundaries match the phonological boundaries of North American dialects, though *coke* in the South comes closest.

Table 21.1. Isogloss parameters for four ‘carbonated beverage’ isoglosses

	Total marked	Total inside	Marked inside	Marked outside	Homogeneity	Consistency	Leakage
soda	282	192	156	126	0.81	0.55	0.26
pop	276	391	260	16	0.66	0.94	0.03
coke	106	176	86	20	0.49	0.81	0.03

DARE gives a regional entry for *coke* as the general term for a carbonated drink, and describes its distribution as “Chiefly Sth, Smidland, SW”, which is not inconsistent with Map 21.1. DARE also supplies data on *pop*, with the map shown in Figure 21.1. Again, this is not inconsistent with Map 21.1, bearing in mind that any blank spaces in the DARE map would be filled with *soda* and *coke*. The *pop* area then would begin in western New York state, and extend westward to the north and north central states.

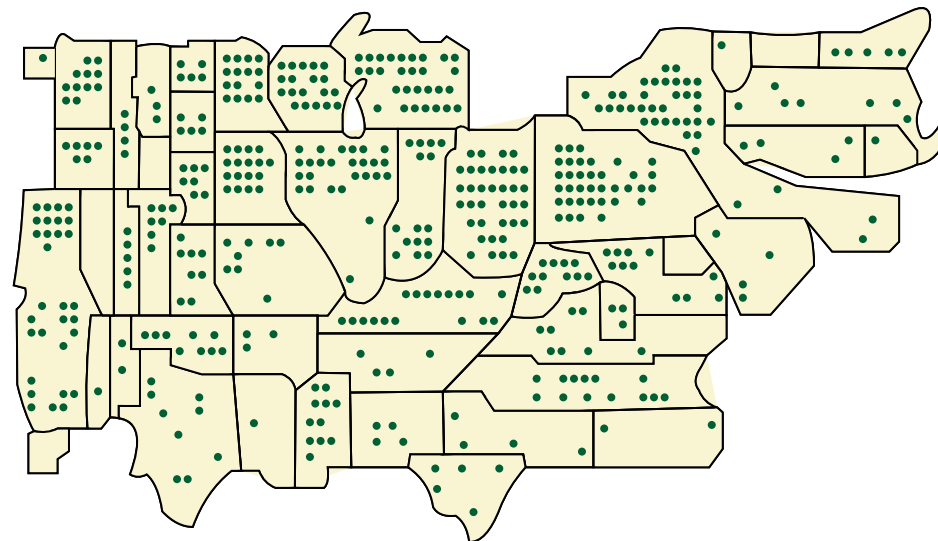


Figure 21.1. Distribution of *pop* for ‘carbonated beverage’ in DARE

A large amount of data on these lexical distributions has been collected recently by Internet surveys. Figure 21.2 is a display of the current results of A. McConchie (2002) for the three major terms. The color coding is the same as that in Map 21.1, with blue, red, and green indicating *soda*, *coke*, and *pop*. The *soda* distribution of Map 21.1 is reproduced in Figure 21.2 as three areas: the enlarged Northeastern area, the St. Louis area, and the southwestern *soda* areas. The concentration of blue *soda* tokens in the area of eastern Wisconsin is stronger than in Map 21.1 and indicates an independent region of Northeastern *soda* influence there. Florida shows the same even division between Northern *soda* and Southern *coke*. An equal division of *soda* and *coke* in the upper South with *coke* appears as well.

Figure 21.2 also delineates the South in a manner parallel to Map 21.1. The Southern *coke* area is even more limited in Virginia and North Carolina, extends northward to Indianapolis in Indiana, and westward to New Mexico and eastern Arizona.

The large and highly homogeneous *pop* area is also identical with that shown in Map 21.1, with New York State split into an eastern *soda* area and a western *pop* area. The area of *pop* predominance extends to the Pacific coast, with the exception of Wisconsin and St. Louis.

The regional character of *pop* and *coke* appears in Figure 21.2 as the absence of green symbols in the Southern red area and in the predominantly blue areas. The more general recognition of *soda* can be seen in the scattering of blue symbols throughout the predominantly red and green regions, as well as in its predominance in widely separated areas on both coasts.

Internet surveys such as McConchie (2002), Vaux et al. (2004), and Campbell and Plumb (2002) are effective in accumulating large amounts of data without controlling for the geographic origin of the respondents.³ Figure 21.2 is a display of 149,000 responses. The maps provided by these internet surveys do not permit one to draw isoglosses with any degree of certainty, but there is a rough coincidence of the areal configuration of these surveys with the 768 points of ANAE.

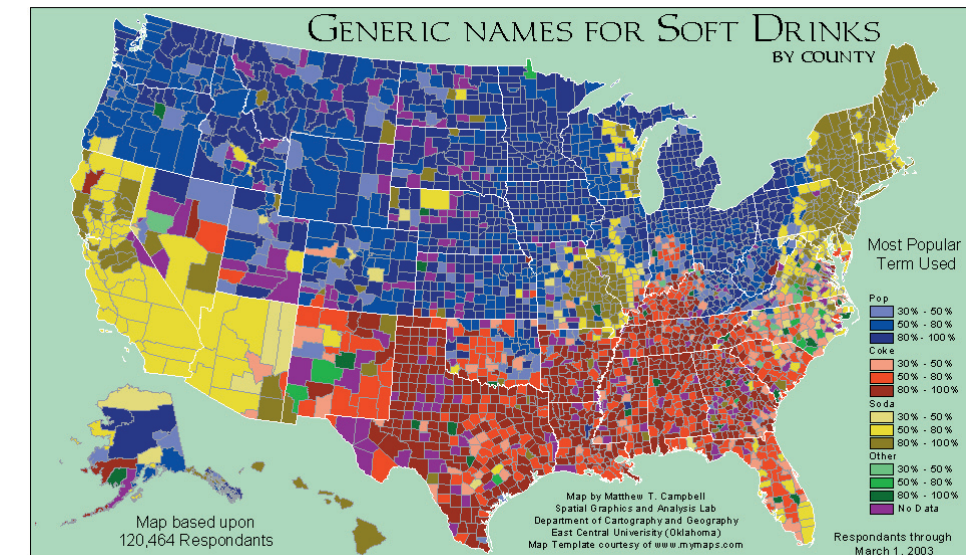


Figure 21.2. Distribution of *soda*, *pop* and *coke* in an internet survey (McConchie 2002)

21.2. /u/ and /uw/ in roof

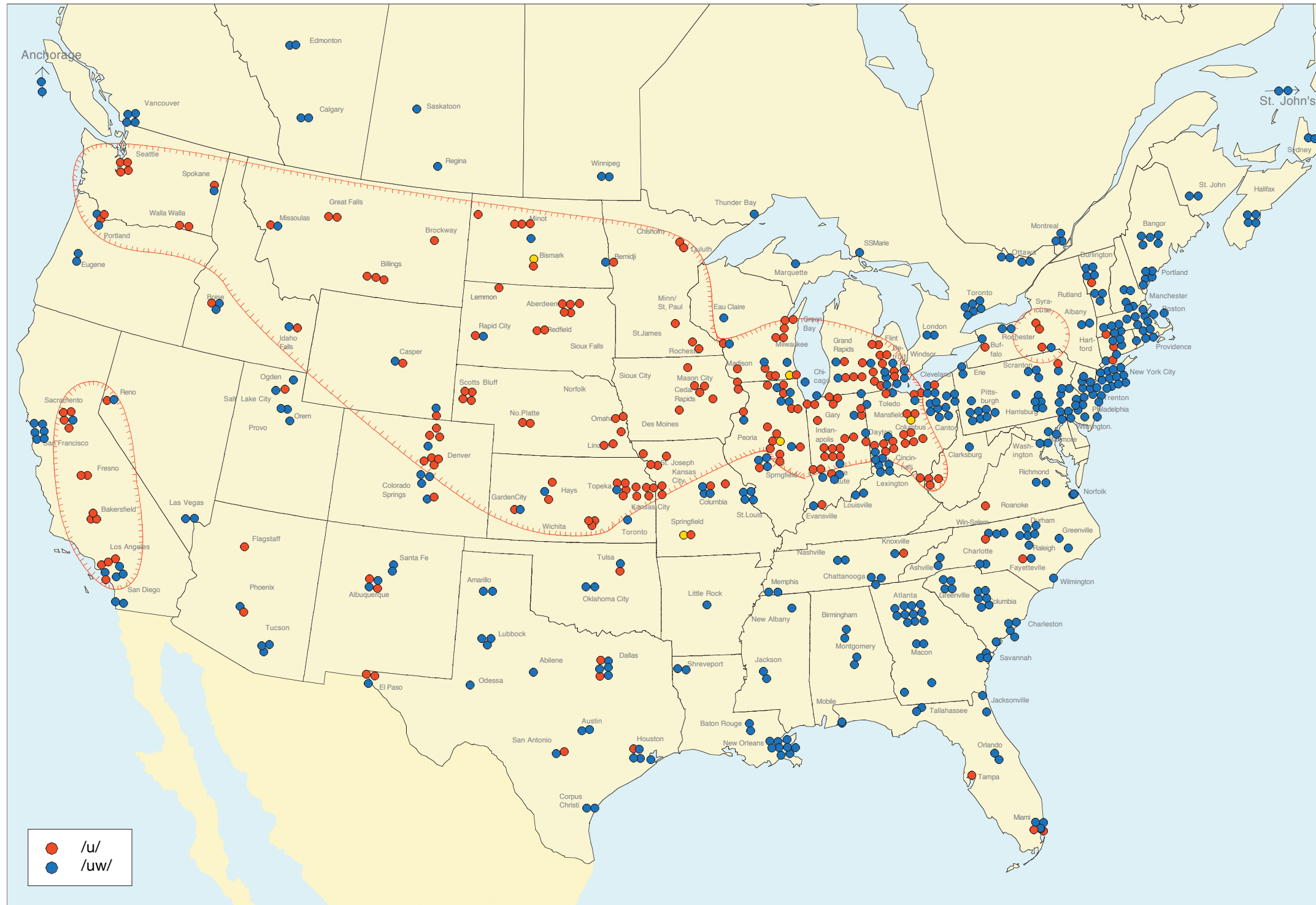
Map 21.2 shows the incidence of /u/ and /uw/ in the word *roof*. It is a large and coherent area, encompassing most of the western portion of the Inland North and adjoining sections of the Midland. In New York State, only one small area around Syracuse is included in the /u/ territory.

The southern edge of the /u/ area follows an irregular pattern, including a part of West Virginia, but excluding Cincinnati. The lower third of the Midland area agrees with Southern /uw/ in *roof*. The /u/ area extends westward to the Pacific Northwest. Canada is strictly excluded, with no trace of /u/ in this word. In addition to the coherent area marked out by the main isogloss, a separate area of /u/ pronunciation is found in central California.

Table 21.2 displays the isogloss parameters for the /u/ ~ /uw/ line in *roof*.

³ The McConchie survey asks for “home town” with city, state, and zipcode without specifying further the years spent in that area, an approach which may be more suitable for lexical items than for phonological issues (Payne 1976).





Map 21.2. The distribution of /u/ and /uw/ in *roof*



From the many regional differences in lexical incidence, ANAE included only a few for comparison with phonological isoglosses. This map shows the shortening of /uw/ to /u/ in the word *roof*. There is a clear geographic pattern, which reflects only in part the isoglosses drawn in Chapters 11–20. Shortened *roof* is found in

the western sections of the North and the Midland, extending further westward to the Pacific Northwest, with smaller concentrations in California (excluding San Francisco) and central New York State. It is notably absent in Canada, the Mid-Atlantic States, and most of the South.

Table 21.2. Isogloss parameters for the /u/ in roof boundary

	Total marked	Total inside	Marked inside	Marked outside	Homo-geneity	Consistency	Leak-age
/u/ in roof	282	192	156	126	0.81	0.55	0.26

21.3. The geographical distribution of positive *anymore*

A number of studies have found considerable geographic variation in Americans' use of sentences with *anymore* in a positive context (Labov 1972; Hindle and Sag 1973; Hindle 1974; Murray 1993). The Telsur interview elicited responses to a range of grammatical forms, asking the subjects to respond on a three-point scale, with the instruction:

For each sentence I read you, I'd like you to tell me whether you think it sounds like something you could say yourself, or something you've heard around your area but you wouldn't say, or something you've never heard before.

The subjects' use of the *positive anymore* construction was assessed by responses to the following three sentences:

- What if you were looking at the price of a new car and someone said, "Boy, cars are sure expensive anymore!"?
- What if someone said, "It's real hard to find a good job anymore"?
- What if someone said, "I used to watch football, but anymore I watch baseball"?

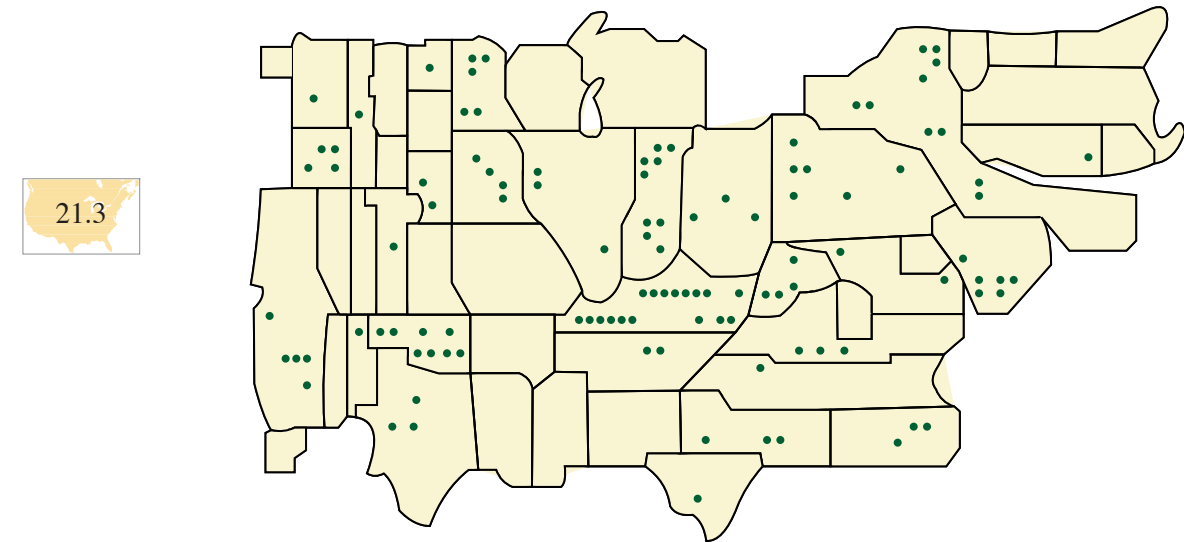
The scoring in Map 21.3 is based on the dominant pattern of response to these three sentences. A coherent region similar to the isogloss of Map 21.2 appears in which the majority of subjects respond that they would use this form themselves. The area outlined in red covers the Midland, including Pittsburgh and Philadelphia, and a good portion of the South Midland as defined in Kurath (1949). However, the line falls well to the south of the North–Midland lexical isogloss shown on Map 21.3. Chapter 14 showed that this isogloss delimits with the phonological features that differentiate the North and the Midland. Both Indianapolis and Columbus show divided use. A slight majority of speakers in Indianapolis report the use of *positive anymore* themselves (8 out of 14), while only a minority of Columbus subjects do so (7 out of 17).

Two small areas of *positive anymore* use appear on Map 21.3 outside of the Midland area: one in north-central Pennsylvania and south-central New York, centered around Binghamton, and one in Southern Georgia and northern Florida.

Considerable caution must be exercised in interpreting these data. *Positive anymore* shows a disparity between intuitions and actual use. Long-term studies of *positive anymore* in Philadelphia show that the great majority of speakers will use *anymore* in constructions like (a)–(c) above, when enough spontaneous speech is recorded, but only about half will recognize this construction in response to direct questions (Labov 1972). Since it is not stigmatized overtly, and it is widely used by all social classes in speech, it is not yet clear why these intuitive responses differ so widely from practice.⁴

Murray 1993 reports a large-scale mail survey of the use of *positive anymore* throughout the Midwest, which indicates its widespread use in Midland areas, especially those settled by the Scots-Irish.⁵ DARE has an extensive entry on *positive anymore*, along with the map of Figure 21.3. The density of responses

is much lower than that of Figure 21.1. The highest concentration appears in Kentucky, Indiana, and Oklahoma, which is not inconsistent with Map 21.3.

Figure 21.3. DARE informants who use *positive anymore* sentences

21.4. *needs* with the -ed participle

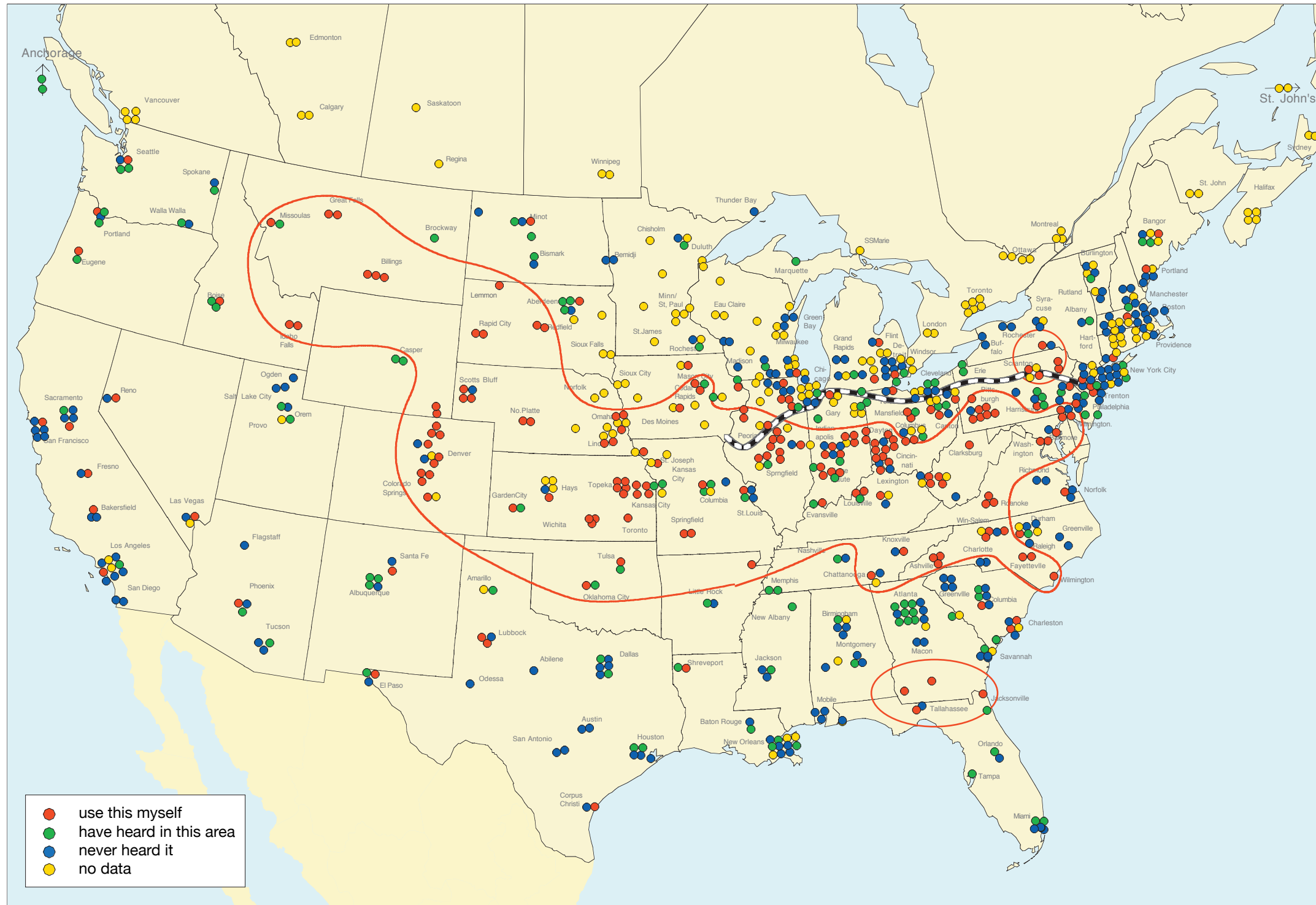
A second Midland grammatical construction surveyed by ANAE is the *needs+V+ed* pattern. Map 21.4 displays data on responses to questions on the following sentences:

- What if there were crumbs on the kitchen floor and someone said, "the floor needs swept"?
- What if a mother said to her child, "your hair needs cut"?

This construction has long been identified with the Pittsburgh area, but studies such as Frazer, Murray, and Simon (1996) showed that it had a broader Midland base. Map 21.4 repeats the solid-red isogloss from Map 21.3, and superimposes an oriented red isogloss indicating the outer limits of the response to sentences (d)–(e) "I would use this myself", indicated here by red symbols. The *needs+V+ed* isogloss coincides generally with the *positive anymore* isogloss, but is more tightly confined to the Midland region as defined in Chapter 11. It does not extend as far southward, but stops at the Midland/South line marked by the

⁴ Wide differences in response to *positive anymore* sentences may be due in part to the cline of syntactic acceptability reported in Labov (1972) and Hindle and Sag (1973), but also due to pragmatic factors. In the eastern part of its range, *positive anymore* appears to be associated with the speech act of *complaint*. The cognitive dimension of "likelihood of occurrence" is then supplemented by the dimension of "speaker's desire for the event to occur". The LAMSAS schedule did not include *positive anymore*, but Guy Lowman did note sentences with *positive anymore* in his notebooks, and since the same sentence often occurs, it seems that he did ask for its acceptability. The density of such notations increased sharply when halfway in his westward trajectory across Pennsylvania, Lowman switched from a neutral sentence to the complaint *Farmers are pretty scarce around here anymore*. This high rate of notation continued throughout his interviews in the Appalachian states (R. McDavid, personal communication).

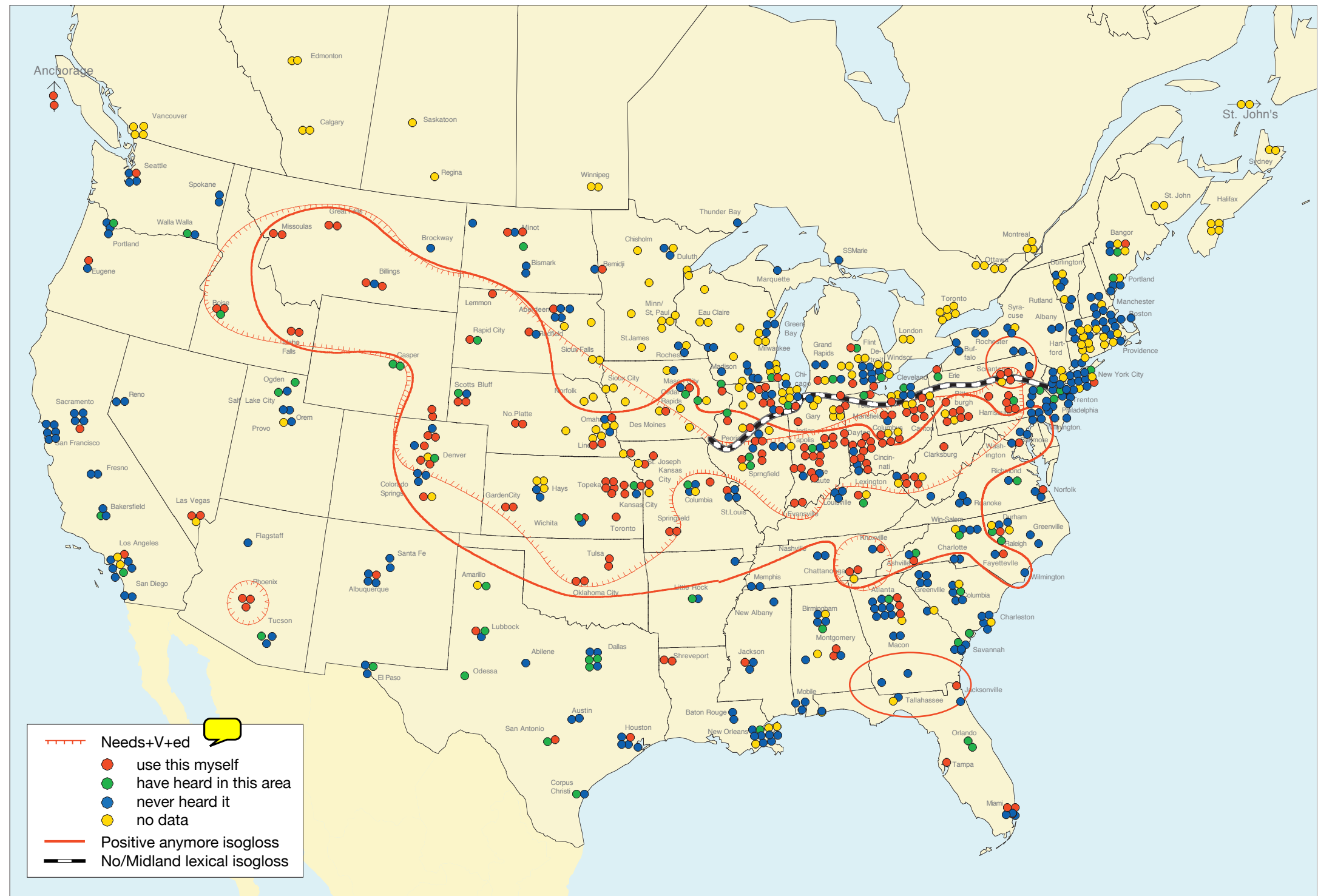
⁵ The maps in Murray (1993) are difficult to interpret, so that it is not possible to compare them with other results shown here.



Map 21.3. Geographic distribution of positive *anymore*

This map charts the use of *anymore* in positive sentences like *It's real hard to find a good job anymore*. This is a well-known pattern of Scots-Irish origin found currently in Northern Ireland. In the U.S., it is reported throughout the Midland

area as originally defined by Kurath, uniting the Upland South with the Midland as defined by ANAE. A concentration of positive *anymore* users is also seen in central New York State and southern Georgia.



Map 21.4. Geographic distribution of the *needs+V+ed* construction

The syntactic construction *The car needs washed* represents the use of the past participle where other dialects use the present participle with *-ing*. Its distribution matches closely the Midland pattern of positive *anymore*, superimposed here from Map 21.3, but is somewhat narrower, excluding most points south of the Ohio

River and the outlying concentrations in Georgia. It corresponds more closely to the ANAE phonological definition of the Midland than positive *anymore*. One outlying city is notable – Phoenix, Arizona. The extension of the Midland to areas of the central Northwest is almost identical with that of Map 21.3.

Ohio River, and extends further northward to include the Midland cities of Ohio – Columbus, Akron, and Canton. The lexical North/Midland isogloss derived from Carver (1987) is added here again to show the degree of approximation of the *needs+V+ed* line to the North/Midland boundary. The oriented red line includes Harrisburg as well as Scranton, but does not reach eastward into southeastern Pennsylvania and Philadelphia. The westward extension to the Midwest and the North Central states matches the positive *anymore* line quite closely, varying with only a few border cities.

The African American subjects in Atlanta testify uniformly to the use of this construction, while others in that city do not. This is a further indication of the extent of racial differences in the Southern cities.

The geographic information given in Frazer, Murray, and Simon (1996) is consistent with Map 21.4. Their Figure 1 indicates a general Midland distribution, and their Figure 2 shows that the northern limit of *needs+V+ed* in Illinois falls close to the North–Midland line.

Responses to questions about *needs+V+ed* are subject to the same uncertainties as positive *anymore*, in that conscious recognition falls short of spontaneous speech. The isogloss parameters for these boundaries are similar, as shown in Table 21.3. *Needs+V+ed* has somewhat lower homogeneity, and higher consistency. The geographic limits of *need+V+ed* are more discrete, as confirmed by the low leakage value.

Table 21.3. Isogloss parameters for two Midland grammatical features

	Total marked	Total inside	Marked inside	Marked outside	Homogeneity	Consistency	Leakage
positive <i>anymore</i>	214	227	151	63	0.67	0.71	0.11
<i>needs+V+ed</i>	106	176	86	20	0.49	0.81	0.03