

### Settlement Patterns and the Eastern Boundary of the Northern Cities Shift

Aaron J. Dinkin, University of Pennsylvania  
*dinkin@babel.ling.upenn.edu*

*ANAE* (Labov et al. 2006) defines dialect regions in terms of major cities. Dialect-region boundaries in less densely populated areas are not examined.

New York State sits at the boundary between several *ANAE* dialect regions, particularly **Inland North** and **Western New England**.

**Western New England:**

- Includes Albany as well as cities in western New England proper
- Subdivided by Boberg (2001) into NWNE and SWNE

**Inland North:**

- Home of the Northern Cities Vowel Shift (NCS)
- Includes Syracuse, Rochester, Buffalo, and points west

**Disagreement on Nature of Inland North–WNE Boundary**

- *ANAE*: Inland North has a distinctive phonological system because of its particular settlement history (see Dinkin 2006 on this hypothesis); predicts sharp boundary
- Boberg (2001): SWNE and Inland North differ only in “the relative advancement of the Northern Cities Shift”; predicts fading boundary



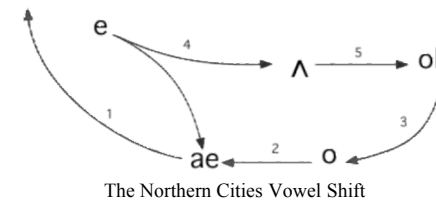
Map: New York State, showing cities sampled in *ANAE*, Dinkin & Labov (2007), and this study.

Dinkin & Labov (2007): data from Utica, Gloversville, Amsterdam, and Schenectady; placed NCS/WNE boundary tentatively between Gloversville and Amsterdam

**This study:** data from Gloversville (7 new speakers), Amsterdam (5 new speakers), Oneonta (9 speakers), Watertown (10), Glens Falls (7)

**Methodology:**

Short Sociolinguistic Events (cf. Ash 2002) carried out in summer 2007, 10–25 minutes each including formal elicitation methods. Formants measured in Praat, normalized in Plotnik 8 using log-mean normalization parameter from *ANAE*. About 500 stressed vowel tokens measured for most speakers.



**Labov (2007)’s vowel mean diagnostics for participation in NCS**

- **ED criterion:** /e/ less than 375 Hz fronter than /o/
- **UD criterion:** /o/ fronter than /Λ/
- **EQ criterion:** /æ/ both fronter and higher than /e/
- **AE1 criterion:** /æ/ higher than 700 Hz (i.e., F1 is less than 700 Hz)
- **O2 criterion:** /o/ fronter than 1500 Hz

(All means are computed disregarding tokens before nasals and liquids.)

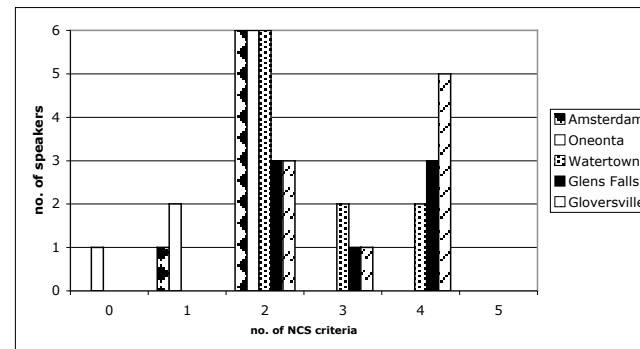


Chart: NCS features exhibited by speakers in this study and Dinkin & Labov (2007)

## Results:

- Speakers in Amsterdam and Oneonta meet 2 or fewer NCS criteria, agreeing with *ANAE* WNE speakers.
- Speakers in Gloversville, Watertown, and Glens Falls meet 2–4 NCS criteria, midway between WNE and Inland North speakers (who typically meet 4–5 criteria).

/æ/-tensing index:  $\text{meanF1}(e) - \text{meanF1}(\text{æ})$   
quantitatively measures advancement the first stage of the NCS.

Inl. North	G'ville	G. F.	W'town	Oneonta	A'dam	WNE
+101 Hz	+3 Hz	-15 Hz	-18 Hz	-85 Hz	-98 Hz	-91 Hz

Table: Average /æ/-tensing index for cities in this study plus WNE and N.Y. Inland North

## Results: basically the same as above

- Amsterdam and Oneonta are essentially the same as WNE.
- Gloversville, Glens Falls, and Watertown are intermediate between Inland North and WNE: all different from WNE and from Inland North at  $p < .02$  or better.
- No significant difference among Gloversville, Glens Falls, and Watertown, or between WNE and Oneonta or Amsterdam.
- Gloversville and Amsterdam **do not overlap** in /æ/-tensing index.
- **Subdividing WNE:** Gloversville, Watertown, and Glens Falls closest to SW New England; Amsterdam and Oneonta very like Albany and Schenectady.

## Settlement history of these communities:

- **New York State** originally Dutch “New Netherland” colony; many settlements founded by Dutch settlers (Albany, Schenectady). Came under English control in 1664.
- **Amsterdam** founded late 18<sup>th</sup> c. (Farquhar & Haefner 2006); leading Dutch families in early 19<sup>th</sup> c. including Vedder and Hagaman (Donlon 1980); by 1804, “the hamlet had acquired a considerable population, with an almost equal proportion of Dutch and Yankees” (Frothingham 1892b).
- **Gloversville** area basically depopulated after Revolution; “the immigration was largely of Anglo-Saxon elements. The Dutch and Germans of the Mohawk Valley were already dwelling upon richer lands.” “Among the early settlers the Connecticut influence seems to have been strongest.” (Frothingham 1892a).
- **Glens Falls** first settled by Quakers in 1763 (Brown 1963), ultimately from New Milford and Danbury, Conn. (Hyde 1936). Moreover, in 1784 “joining the Quakers were Yankees, many from Connecticut, in a migration that went on unabated until nearly 1850. For many of these sojourners, residence here was temporary as families continued a westward trek” to western N.Y., Michigan, etc. (GFHA 1978).
- **Watertown** founded 1800 (Gould 1969); early landowners mostly from Oneida County, with very few Dutch names among early settlers (Hough 1854).
- **Oneonta** had German, New England Yankee, and New York Dutch influences among earliest settlers (Campbell 1906).

So **Amsterdam and Oneonta** had substantial New York Dutch settlement, and resemble Albany and Schenectady in not showing NCS. **Gloversville, Watertown, and Glens Falls** never had significant Dutch population, and were settled in WNE–Inland North migration pattern, and show NCS sound changes.

**Conclusion:** A city in eastern New York is not subject to NCS if it was settled in significant part from Dutch-origin populations.

This **resolves the dispute** over the Inland North–WNE boundary:

- **Sharp** boundary, as predicted by *ANAE*, between Yankee and Dutch cities, like Gloversville and Amsterdam
- **Fading** boundary, as predicted by Boberg (2001), within Yankee area, from Inland North proper with full NCS, across Watertown, Gloversville, and Glens Falls, with some NCS tendencies, to Western New England, with minimal NCS features

**Further subdivide ANAE's** WNE region beyond Boberg's description:

- **Northwestern New England**, exhibiting low back merger
- **Southwestern New England**, Yankee settlements without low back merger and open in principle to NCS
- **“New Netherland”**, NY Dutch settlements resistant to NCS

## References (they're all in the first half of the alphabet for some reason):

- Ash, Sharon (2002). “The Distribution of a Phonemic Split in the Mid-Atlantic Region: Yet More on Short A”. *Penn Working Papers in Linguistics* 8.3:1–15.
- Brown, William Howard (ed.) (1963). *History of Warren County, New York*. Board of Supervisors of Warren County, Glens Falls, N.Y.
- Boberg, Charles (2001). “The Phonological Status of Western New England”. *American Speech* 76:3–29.
- Campbell, Dudley M. (1906). *A History of Oneonta*. G.W. Fairchild, Oneonta, N.Y.
- Dinkin, Aaron (2006). “Unnatural Classes and Phonological Generalization in Dialect Formation”. Paper presented at NWAV35, Columbus, Ohio; available at <http://ling.upenn.edu/~dinkin>.
- Dinkin, Aaron & William Labov (2007). “Bridging the Gap: Dialect Boundaries and Regional Allegiance in Upstate New York”. Paper presented at Penn Linguistics Colloquium 31, Philadelphia; available at <http://ling.upenn.edu/~dinkin>.
- Donlon, Hugh P. (1980). *Amsterdam, New York: Annals of a Mill Town in the Mohawk Valley*. Donlon Associates, Amsterdam, N.Y.
- Farquhar, Kelly Yacobucci & Scott G. Haefner (2006). *Amsterdam*. Arcadia, Charleston, S.C.
- Frothingham, Washington (ed.) (1892a). *History of Fulton County*. D. Mason, Syracuse, N.Y.
- Frothingham, Washington (ed.) (1892b). *History of Montgomery County*. D. Mason, Syracuse, N.Y.
- Glens Falls Historical Association (1978). *Bridging the Years: Glens Falls, New York, 1763–1978*. Glens Falls Historical Association, Glens Falls, N.Y.
- Gould, Ernest C. (1969). *Centennial History of Watertown, N.Y.* New York.
- Hough, Benjamin Franklin (1854). *A History of Jefferson County in the State of New York*. Joel Munsell, Albany, N.Y.
- Hyde, Louis Fiske (1936). *History of Glens Falls*. Glens Falls Post Company, Glens Falls, N.Y.
- Labov, William (2007). “Transmission and Diffusion”. *Language* 83.2:344–387.
- Labov, William, Sharon Ash, & Charles Boberg (2006). *Atlas of North American English*. Mouton/de Gruyter, Berlin.