

Residential Segregation and Ethnolinguistic Variation

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Abstract: One oft-hypothesised cause of ethnolinguistic variation is residential segregation. This review article synthesises several strands of variationist sociolinguistic research, particularly among whites and African Americans in the United States, to show that the degree of residential segregation in a space does indeed have a strong effect on patterns of ethnolinguistic variation. In highly segregated spaces, ethnic groups diverge in their use of linguistic features, while in less segregated spaces, groups converge. Meanwhile, literature on housing policy indicates that residential segregation results from state influence. That residential segregation conditions patterns of variation thus entails that housing policy plays a role in this conditioning. This suggests that housing policy constitutes *indirect language policy*, in contrast to explicit policies which refer to some aspect of language use (media, education, etc.). In this situation, state efforts to separate ethnic groups have an indirect impact on the appearance of ethnolinguistic variation. Further research into the interface of language policy and variationist sociolinguistics is necessary, as housing policy carries clear links to variationist sociolinguistic theory.

Keywords: segregation, ethnolinguistic variation, housing policy, variationist sociolinguistics, United States

1 Introduction

Variationist approaches to ethnolinguistic variation typically describe features by comparing the ‘standard’ variant to that of a minority ethnic group. Within the United States, for example, this is often a comparison of Mainstream US English (MUSE), thought of as spoken by whites, and some other group’s speech (typically African American English). This type of comparison frames the research question as a matter of whether ethnic groups converge or diverge in their use of a given sociolinguistic variable. This question does not specify a direction of change, and should not be interpreted as a question of whether minorities are assimilating to the dominant group. Variationists conducting such research are searching for social factors that influence said convergence or divergence.

The amount of contact between groups often plays a role. Studies like Kerswill and Williams’ (2000) work in the British New Town of Milton Keynes find that increased contact between groups speaking different varieties of a language often leads to convergence. These studies, however, often focus on intraethnic contact. Interethnic contact is often more limited, making the relative lack of contact perhaps a more relevant social factor to consider. Indeed, because of the importance of contact and social networks to patterns of variation, several linguists hypothesise that because residential segregation of ethnic groups reduces opportunities for contact, it affects patterns of ethnolinguistic variation (Yaeger-Dror and Thomas 2010, among several others). The RESIDENTIAL SEGREGATION HYPOTHESIS (RSH) is summarised in (1):

- (1) Residential Segregation Hypothesis: Due to the lessened inter-group contact, more segregated urban areas will yield more linguistic divergence among the segregated ethnic groups.

Although some scholars seek to test the RSH explicitly (see Kohn 2016), it is more often adopted as an *ex post facto* assessment of research findings: a finding of divergence leads to the observation of residential segregation and proposal of its impact. By comparing results found in

more-segregated cities, particularly those characterised as *hypersegregated* (Massey and Denton 1989), and less-segregated cities, this review demonstrates the validity of the RSH.

Residential segregation, particularly within the United States, is caused in part by housing discrimination (Galster 1986), which is largely instituted through or with the support of state housing policy. The RSH, then, posits an indirect link between state policy and ethnolinguistic variation. While the lack of contact and monoethnic social networks provide a mechanism by which divergence arises, they rely on segregation as an underlying condition to occur. Because this underlying condition is a result of state policy, we can (and should) view state policy as having a hand in ethnolinguistic variation, even though it is not mechanically involved in linguistic variation.

I survey approximately twenty-five sociolinguistic studies that detail ethnolinguistic variation in approximately fifteen urban areas to lend strength to the RSH. Because our discussion of housing policy and its connection to residential segregation is centered on the US, the survey likewise focuses primarily on white/African American variation within the US. When possible, however, I expand upon the review's coverage of ethnicities. This review serves two main purposes: it outlines the theoretical basis of the RSH, and illustrates its overall pattern and under what conditions apparent exceptions occur. Additionally, this review suggests that because housing policy significantly contributes to the conditions under which groups converge or diverge in linguistic patterns, it effectively constitutes language policy. As such, I argue for a view of language policy that expands beyond policies affecting media, education, etc., by including policy that affects population flows and groupings. This link between the study of language policy and the study of variationist sociolinguistics thus offers new avenues for research in both fields moving forward.

2 Housing Policy and the Speech Community

Early views of residential segregation within the city took it to be a natural process (for example, Wirth 1938) in which groups self-segregate out of in-group identification. This view misses crucial causes of residential segregation. While prejudice and economic disadvantages have roles to play, Galster (1986) demonstrates an empirical link between housing discrimination and the degree of segregation in metropolitan areas. Such discrimination is often a matter of policy. Segregated spaces were planned, and arose due to public policy. Within the context of the United States, there are three main strategies, or 'pillars', that built and maintain segregated spaces: realty provisions, land-use regulations, and mortgage lending.

2.1 Three Pillars of Housing Discrimination

Although some aspects of these three strategies are enacted by private citizens, their strength and success in segregating space derives from state support. One clear example of this is the use of realty provisions. The main form of this was found in deed covenants, which are private agreements among homeowners in a neighbourhood to not sell to an undesired group. These have roots in efforts to prevent unwanted industry from entering a neighbourhood, but were adapted to prevent racial and ethnic minorities from moving into a community (Abrams 1955). While covenants are private agreements, they can only serve a useful purpose when enforced. That is, if a homeowner who signed a covenant can be found in breach of contract for selling to a minority and therefore liable for damages, the homeowner will be reluctant to sell to minorities. If such an agreement is unenforceable, there is no reason to obey the covenant. As such, state power to enforce contracts in the judicial system made covenants a useful tactic for segregating a city. Covenants were not outlawed in the US until the 1948 *Shelley v Kraemer* Supreme Court decision, by which point they had successfully played their role in segregating cities.

Like covenants, mortgage lending is an ostensibly private enterprise that segregated cities with the help of state policy. By choosing whom to lend money, mortgage lenders have some control over who moves where within a city. Although a widespread practice today, such lending took its modern form in the 1930s with the creation of the Home Owners Loan Corporation and Federal Housing Administration. These institutions either served as lenders themselves (HOLC) or insured mortgages (FHA). The promise of a FHA-insured mortgage made lending possible on a larger scale than it was previously (Jackson 1980). State policy infiltrated lending through restrictions on for which homes or neighbourhoods mortgage lending could be insured. The FHA adopted explicitly discriminatory practices in determining which mortgages were insurable (Abrams 1955).

The best-known example of these practices was redlining, by which HOLC/FHA graded neighbourhoods on home quality and price stability. Explicit in the grading criteria was the homogeneity of the neighbourhood, and the belief that minorities in a community lowered property values meant that African Americans or Jews in a neighbourhood instantly lowered its grade (Jackson 1980). As such, the best-rated neighbourhoods were predominantly white and upper-/middle-class. The FHA would not insure mortgages on homes in low-grade areas, nor would it insure homes in high-grade areas sold to minorities (Abrams 1955). By focusing on mortgages, the FHA was subsidizing home building – which meant large-scale suburbanization (Jackson 1980). However, through redlining, the FHA was primarily subsidizing white movement to suburbs – again segregating the metropolitan area as a matter of state policy.

The state did not always contribute to segregation of space by influencing private activity; at a local level, policy was used to explicitly segregate space. This was achieved with land-use regulation, the use of a city's police power to control how land is used through zoning ordinances, building codes, etc. (Silver 1996). Zoning originated with the goal of protecting neighbourhoods by preventing industrial development, slum construction, etc., within them. However, zoning in the US took on racial attributes from its early adoption in San Francisco regulating building construction of laundries. The San Francisco ordinance targeted Chinese laundry owners, preventing them from earning a livelihood (Abrams 1955). Baltimore adopted the first explicitly racial zoning policy in 1910, which set aside blocks for African Americans and others where African Americans were forbidden from living (Silver 1996). Explicitly racial zoning was outlawed fairly quickly; *Buchanan v Warley* ruled it unconstitutional in 1917.

This decision did not stop racial zoning but rather forced it to be masked. City planners created zoning ordinances and building codes like those used earlier in San Francisco to realise goals of segregation in a constitutionally-allowed manner (Silver 1996). Abrams (1955) details several methods for achieving this. One method was to zone neighbourhoods in a way that restricted who could afford to live there (Ashton 1984). Mandating a minimum 1-acre lot, for example, has the effect that only wealthy homeowners can afford to live in a neighbourhood. This excludes people on a class basis, which at the same time means the vast majority of some ethnic minorities are excluded. Zoning could be used to expel residents as well. Cities often zoned African American neighbourhoods as a mix of residential and industrial uses, while white neighbourhoods were solely residential (Silver 1996). Allowing industrial uses of African American neighbourhoods lowered the quality of life, inducing many to sell and move out.

Between these three strategies, American cities were cast as segregated spaces as a matter of policy. Note that although state policy encouraging residential segregation was largely overturned by the Fair Housing Act of 1968 and *Jones v Mayer* decision that same year (Wiese 2004), the legacy endures. Integrating an already-segregated community would be difficult

enough if such an effort were fully supported. However, efforts to discriminate in housing did not disappear in 1968, but rather became more covert. Massey and Denton (2010) detail some methods: surreptitious discrimination by real estate agents, ending building projects rather than conforming to court orders, etc. Purnell, Idsardi and Baugh (1999) suggest that language contributes to agents' surreptitious discrimination, as realtors respond to phone calls from prospective tenants based on their perceived race. Covert methods of discrimination and other non-explicitly racial policies help to maintain residential segregation in the present.

2.2 *The Speech Community*

How does housing policy connect to sociolinguistic theory? Let us first consider the place of segregation, which will serve to review the theoretical underpinnings of the RSH. The point of residential segregation is to separate groups; a key effect of this is to reduce contact and communication between groups and individuals within them. As such, to analyse segregated communities carries particular implications with respect to the speech community and social networks.

The *speech community* is a fundamental concept meant to describe a social aggregate who share some aspect of language, although it is not clearly defined (see Patrick 2002 and Muehlmann 2014 for extended discussion). Basic criteria for a definition include a role for shared language use, linguistic patterns, and language attitudes. The group is typically in a social or geographic space, but treated as a linguistic object. As Muehlmann (2014: 581) observes, it remains an open question whether the speech community should be taken to itself constitute a social group. Some conceptions stress the role that social interaction plays in delimiting the speech community (Gumperz 1962/1993). While perhaps not explicitly stated in other conceptions, one would expect shared aspects of language to rely on such interactions. This means that by way of affecting patterns of contact and communication, residential segregation necessitates problematizing who is a member of a speech community.

In particular, it questions whether the features of Labov's concept of the speech community (introduced in Labov 1966/2006), in which geographical space plays an important role, can apply to the entirety of a segregated city. As summarised in Kerswill (1993), the Labovian speech community, in addition to containing speakers who are in contact with and communicate with one another, involves:

- (3) a. The nativeness of community members
- b. Uniform patterns of variation
- c. Shared social evaluation of linguistic features
- d. The systemic identity of varieties.

Residential segregation especially raises questions about the second and third features of the Labovian speech community. Can there be uniform patterns of variation when speakers do not encounter members of other social categories? And how can there be shared social evaluation in this situation? As such, we must question whether African Americans and whites in a segregated US city, for instance, can constitute a single speech community.

Although Labov (1966/2006) claims that New York constitutes a single speech community, he ultimately suggests that African Americans and whites within the city are separate speech communities due to ethnically based phonological differences. This reflects that for Labov, the speech community is defined especially in linguistic, rather than social terms. Using this approach, he reaches the same conclusions in Philadelphia as in New York (Labov 1989). Gumperz' (1962/1993) work suggests that a conception of the speech community defined in less exacting linguistic terms would treat segregated groups as separate speech communities as

well. For Gumperz, social interactions and their frequency are central to the speech community, and it is distinguished from others by lessened inter-group communication (1962/1993). Because residential segregation explicitly reduces contact and communication, we would expect to find segregated groups in separate speech communities under this model.

Residential segregation likewise carries implications for social networks. Analysis of social networks places emphasis on mapping which speakers know and regularly interact with one another. Such interactions go beyond conversation; Milroy (1987) describes the social network as involved in commerce and setting out rights and responsibilities among members. In a segregated city, these roles are less likely to be multiethnic contexts. Of particular importance to a social network approach is the density and multiplexity of ties between members (Milroy 1987). Dense, multiplex networks tend to be close-knit communities that are conservative with respect to linguistic norms and language change, while changes are spread by members with weaker network ties (Milroy and Milroy 1985: 362). In an ethnically integrated community, we would expect to see ethnolinguistic convergence on this basis; close-knit multiethnic networks will share norms, while in less-dense multiethnic networks, changes will spread throughout. Residential segregation, however, makes multiethnic networks less likely. No ties at all between groups would suggest divergence. In the US, this is fairly common; in most metropolitan areas contact between African Americans and whites has a likelihood of less than 5% (Massey and Denton 2010). Any ties that do exist are likely to be weak. While this may suggest convergence, there are two reasons why this is unlikely. First, if a linguistic feature serves as a network marker, it is less likely to show change (Milroy and Milroy 1985). As such, innovative features that would otherwise spread may be seen by one monoethnic social network as a marker of another monoethnic social network. Secondly, while Milroy and Milroy (1992) observe that cross-ethnic social networks tend to be neither dense, multiplex, nor territorially based, they also suggest that urban ethnic minority communities are close-knit and form strong ties. In segregated cities then, we would expect ethnic groups to form close-knit monoethnic social networks that resist changes that would otherwise result in ethnolinguistic convergence.

In sum, the reduction in interethnic contact and communication triggered by residential segregation suggest that segregated ethnic groups should perhaps be treated as separate speech communities. This is particularly because depending on the level of segregation, we would expect to find monoethnic social networks with few, if any, weak multiethnic ties. Together, these suggestions form the basis for the RSH: separate speech communities and close-knit monoethnic social networks suggest ethnolinguistic divergence. Note that this is not a causative relationship *per se*. Rather, residential segregation is an underlying condition under which mechanisms of change would be expected to yield divergence.

Changing the underlying conditions could make a multiethnic speech community or multiethnic social networks more or less likely. As such, changing these conditions has the potential to change the expected outcome of linguistic change from divergence to convergence, or vice versa. This is where housing policy plays a role. Realty provisions, land-use regulations, and mortgage lending regulations serve as mechanisms by which the state can change the level of residential segregation in a given space. We thus predict the state indirectly affects whether we encounter ethnolinguistic divergence or convergence through changing these conditions. Therefore, if the body of literature concerning ethnolinguistic variation supports the RSH, it also supports the following corollary:

(3) Corollary to Residential Segregation Hypothesis: Through housing policy, the state indirectly exerts influence over patterns of linguistic variation by changing the level of residential segregation in a space.

Because housing policy plays such a fundamental role in residential segregation, support of the RSH entails support for its corollary. If the RSH, and by extension this corollary, holds, I argue that this means housing policy would constitute an indirect form of language policy. Below, I focus on one case study of a segregated city in detail to explore the types of policies that may be found in a city, the type of linguistic data that is relevant, and what the RSH claims about these facts.

2.3 *Extended Case Study – St. Louis*

St. Louis, Missouri, provides an ideal test environment of the RSH. As Gordon (2008) notes, St. Louis is demographically split between African Americans and whites, with very few members of other ethnic groups in the area. Linguistically, St. Louis Englishes may be distinguished from those of the region around the metropolitan area by several phonological features, making discussion of ethnolinguistic variation easier to disambiguate from supraregional patterns.

To distinguish between differing degrees of segregation among various metropolitan areas, Massey and Denton (1989) define five separate dimensions of segregation. They calculate indices for each dimension of segregation, and consider metropolitan areas with indices indicating extreme segregation along at least four dimensions to be *hypersegregated*. St. Louis is one such hypersegregated city. Gordon (2008) describes state and local policies designed to segregate the city in detail, and examines the range of explicit racial zoning ordinances in the early 20th century, racial covenants, and white flight to the suburbs, among other things. The three pillars of housing discrimination were all active and well-documented in St. Louis. In fact, both the *Shelley* and *Jones* cases originated due to housing discrimination in the St. Louis area (Wiese 2004). After the 1917 *Buchanan* decision, St. Louis adopted covertly racial zoning. Gordon (2008) finds both exclusive zoning within the suburbs, particularly evident in lot-size restrictions in wealthy suburbs like Ladue, and expulsive zoning within the city itself. Deed covenants, which generated the *Shelley* case, created a ‘steel ring’ in which African Americans could live. Mortgage lending was used to segregate as well; Jackson (1980) shows that HOLC and FHA clearly subsidised white movement to suburbs. According to a recent NCRC report, mortgage lending continues to be a tool used in housing discrimination in the City of St. Louis (NCRC 2016). The report finds that race, in addition to class, is a significant factor that influences the amount of lending in the city. This differs from the findings in the rest of the metropolitan area, in which only class plays a significant role. This most likely highlights the suburbs’ reliance on exclusive zoning to segregate.

Sociolinguists have studied sound changes both among St. Louis whites (Murray 2002; Goodheart 2004) and African Americans (Blake and Shousterman 2010). During the 20th century, whites adopted features of the Northern Cities Shift (NCS), among them raising TRAP, fronting LOT, lowering THOUGHT, and backing DRESS. While these features are found throughout American cities near the Great Lakes, St. Louis is unique in being the only major city geographically removed from the Great Lakes region to have them (Labov, Ash, and Boberg 2006). Blake and Shousterman (2010) show that St. Louis African Americans are adopting extensive r-centralization, in which lexical items containing NEAR and SQUARE (for example, *here* and *there*) are produced closer to NURSE (‘hurr’ and ‘thurr’). Neither the NCS nor r-centralization are reported among the opposing ethnic group. As such, the adoption of each of

these sound changes represents a trend of divergence between the Englishes of St. Louis whites and African Americans.

The RSH claims a link between the above facts. Jackson (1980), Gordon (2008) and the NCRC (2016) show extensive residential segregation that is a result of state policy. Given these underlying conditions, there is little interethnic contact in the region. At the same time, linguists have shown that St. Louis whites and African Americans diverge in their adoption of local sound changes. While the hypothesis does not claim any specific sound changes will occur, it does claim that the lack of contact between St. Louis whites and African Americans means the groups are in separate speech communities, and that social networks will be predominantly monoethnic. As such, sound changes may actuate and circulate differently within each community.

3 Levels of Residential Segregation and Ethnolinguistic Variation

We cannot, of course, prove the RSH from one case study. Nor can we prove it from focusing solely on studies in urban areas with extensive segregation. In this section, I review several studies in urban areas with more segregation, less segregation, and changing degrees of segregation over time. Because the above discussion of the link between discriminatory housing policy and residential segregation is US-centric, the review that follows is as well. I make use of Massey and Denton's (1989) findings regarding hypersegregation to determine 'more segregated' urban areas. According to Massey and Tannen (2015), 52 metropolitan areas within the US have qualified as hypersegregated at some point since 1970, giving us a base of cities to work with. 'Less' segregated examples will not be hypersegregated for the ethnic groups under consideration. As American cities are at least somewhat segregated, contrasting hypersegregated cities with fully integrated cities is not possible. From this survey, I will show that highly segregated cities, and particularly hypersegregated cities, display more divergence between ethnic groups, while cities with less segregation display more convergence. I interpret this as displaying strong support for the RSH.

3.1 Cities with Extensive Segregation

Kohn (2016) tested the effects of segregation on linguistic variation in three cities in North Carolina's Research Triangle: Chapel Hill, Durham, and Raleigh. While this region has not been hypersegregated at any point since 1970 (Massey and Tannen 2015), Kohn's work carefully considers the relation of the degree of segregation in a city to linguistic variation. Whites in this region traditionally participated in the Southern Vowel Shift. This contrasts with the African American Vowel Shift, which affects the DRESS and KIT vowels in AAE differently than seen in the Southern Vowel Shift. Of the three cities, Kohn found that African American speakers in Durham, in which residents were the most segregated, participated the most in the African American Vowel Shift. That is, segregated African Americans and whites in the Research Triangle were more divergent in their speech than those in more integrated neighbourhoods. Crucially, Kohn shows that this pattern, while related to school segregation, primarily reflects community-wide segregation. Raleigh, while residentially segregated, has made efforts to integrate schools in recent decades. There, Kohn finds that the shift to integrated schools does not co-occur with a shift in ethnic divergence/convergence. This suggests that the effect of segregation is due to residential patterns.

Other studies in hypersegregated American cities (as labeled by Massey and Tannen 2015) do not explicitly test the RSH. However, they show a similar pattern of divergence. In Philadelphia, white speakers engage in sound changes involving the FACE, PRICE, GOAT, and MOUTH vowels and display a complex short-a split (Labov, Rosenfelder and Fruehwald 2013). Labov (2014) shows that African Americans do not participate in these patterns, particularly the

short-a split. New York similarly has a traditional short-a split, as well as other features like THOUGHT-raising and non-rhoticity (Labov 1966/2006). Becker (2010) shows that these traditional features are in retreat among white speakers and becoming more like MUSE. However, African Americans and Puerto Ricans either maintain or increase use of THOUGHT-raising and non-rhoticity. Much like St. Louis, the rest of the major industrial cities that engage in the NCS – Chicago, Detroit, etc. – are hypersegregated. Van Herk (2008) observes that in each of these major cities, the chain shift has only been adopted by whites. As such, white adoption of the NCS represents ethnolinguistic divergence.

3.2 *Less Segregated Cities*

Kohn (2016) suggests that lower degrees of segregation are correlated with less ethnic divergence or even convergence. One way in which this is clear is the focus so far on ‘white’ speakers. Many ethnic groups make up this category, yet they largely pattern together, particularly within the US (Boberg 2014). This was not always the case: Labov (1966/2006) distinguishes Italians, Jews, and other groups and finds differences between them. Labov’s speakers were from a region that was separated into ethnic enclaves, however. The presence of enclaves has greatly lessened, particularly in the aftermath of postwar suburbanization. Ashton (1984) suggests suburbanites tried to maximise their difference from an Other in order to protect their economic privilege. Lipsitz (1995) argues that this was achieved by racially segregating the suburbs. To do so, the white ethnic groups needed to be cohesively white. Whiteness was thus a project that integrated ethnic groups and lessened distinctions between them. Among ethnic groups constructed as white, there is a high degree of both integration and linguistic cohesion.

Massey and Denton’s (1989) metrics for assessing levels of segregation allow us to identify less-segregated metropolitan areas. While they acknowledge that ‘less-segregated’ may still include significant levels of segregation, there is nonetheless a clear difference between hypersegregated cities and others. They note that within the US, hypersegregation is especially limited to residential patterns involving African Americans and whites. Hispanics and Asians are less segregated from whites regardless of class (Massey and Denton 2010). Within the American context, studies of ethnolinguistic variation involving Hispanics, Asians, and whites thus represent situations of lessened segregation.

There are several specific examples of ethnolinguistic convergence in these situations. In Lansing, Michigan, for example, Hispanics adopt most of the NCS (Roeder 2010). Similarly, in Liberal, Kansas, which has become majority Hispanic due to an influx of immigration in recent decades, Hispanics adopt features of the Elsewhere Shift (Kohn, Dickens and Garcia 2016). At the same time, Kohn, Dickens, and Garcia find that young Anglo male residents of Liberal are adopting some Spanish substrate features common to the Hispanic population, like a monophthongised FACE. There is thus convergence in both directions: Hispanics largely adopt Anglo features, while Anglos accommodate to the new majority.

Lee (2016) finds that Korean-Americans in Bergen County, New Jersey, a suburban county in the New York City metropolitan area, display the nasal TRAP system common to much of the US, as well as the traditional New York THOUGHT vowel. There is change away from this New York feature towards the low back merger by younger speakers. Whites in Bergen County would be expected to display New York features as well. While Lee suggests that the TRAP pattern may be an instance of divergence from local whites, recall that Becker (2010) finds whites retreating from the traditional New York linguistic features. As such, Lee’s work seems to show that Korean-Americans are participating in white sound changes.

In addition to Hispanics and Asians being less segregated from whites, Massey and Denton (2010) also observe that segregation is lessened in cities with a low African American population in comparison to the white population. We have such an example in Davenport, Iowa, where African Americans adopted rhoticity to a far greater degree than African American speakers in segregated cities like Memphis (Hinton and Pollack 2000). Because non-rhoticity is a traditional feature of AAE, this too represents convergence.

3.3 *Changing Degrees of Segregation and Patterns of Variation*

Further evidence of residential segregation's effect on linguistic divergence or convergence comes from cities which changed policies over time, resulting in a change in the degree of segregation. In Pittsburgh, for example, African Americans migrated prior to the Great Migration to work in steel mills. In the late 19th and early 20th centuries, these early migrants were largely integrated at work and home; while some neighbourhoods were more predominantly one race, others were mixed. Eberhardt (2008) argues that African Americans adopted the low back merger of LOT and THOUGHT during this period of contact. Because mergers are notoriously difficult to undo (see Labov 1994: 311--13 for discussion), this feature has persisted in the African American community. However, urban renewal programs in Pittsburgh during the 1950s targeted the mixed-race neighbourhoods for destruction. These were not rebuilt; African Americans were routed into pre-existing African American neighbourhoods in the city, while whites fled to the suburbs. Because of the policies and initiatives behind urban renewal, Pittsburgh became hypersegregated for some time during the second half of the 20th century (Massey and Tannen 2015). Outside of the low back merger's persistence, African Americans and whites are quite divergent. While whites have several features, among them lexical items and a monophthongised MOUTH, that are characterised by the community as 'Pittsburghese' (Johnstone 2009), African Americans have none of them (Eberhardt 2012).

San Francisco shows change in the opposite direction. The city was among those that pioneered racial zoning codes to separate the Chinese and white populations (Abrams 1955). By keeping the city segregated, Chinese residents were linguistically isolated enough to not adopt local features of English (Hall-Lew 2010: 461). These policies were reversed in the mid-1900s, leading to the city and its suburbs becoming much more integrated. In the late 20th century, Asians and whites were much less segregated than African Americans and whites were in San Francisco (Massey and Denton 2010). These changes in degree of segregation correspond to changes in ethnolinguistic variation: Chinese-Americans adopted the low back merger typical of local whites (Hall-Lew 2010). In fact, Hall-Lew suggests that Chinese-Americans now participate in local sound changes to the same degree as whites, including the fronting of GOAT.

3.4 *Summary*

In sum, our survey of the variationist sociolinguistic literature finds a strong correlation between residential segregation and ethnic convergence or divergence. In highly segregated urban areas, there is a great deal of divergence. Less-segregated spaces, on the other hand, show varying degrees of convergence and less divergence than highly segregated spaces. Cases in which the level of segregation changed over time show changing degrees of divergence or convergence: increasing segregation yields increasing divergence, and vice versa. These findings translate to strong support for the RSH. This suggests that the level of segregation is a key underlying condition in determining the shape of the speech community and social networks, and thus, the pattern of ethnolinguistic variation. While support for the RSH entails support for its corollary as well, the cases in which the level of segregation changes is particularly illustrative of the corollary. In the following section, I discuss cases that appear to be outliers.

4 Influence of Contact

Several studies of linguistic variation within segregated cities find ethnic convergence nonetheless. Given the above hypothesis and discussion, these at first glance appear to be counter-examples. However, they all share a key feature: despite the segregation of the city at large, the speakers in each study have integrated social networks. Columbus, Ohio, for example, is a hypersegregated city in which some social networks are integrated. Fix (2011) finds that white women with ties to the Columbusite African American community adopt some morphosyntactic and phonological features of AAE in their speech. Studies of highly segregated urban areas also find neighbourhood effects based on the level of segregation in each neighbourhood. For example, the southeast of Washington, DC is nearly entirely African American. African American speakers from this part of the city are diverging from whites in the rest of the city (Lee 2016). However, Lee finds the opposite among African American speakers in the rest of Washington. While fewer in number, these speakers have far more contact with whites than those in the southeast. Lee shows that these speakers are converging with whites in the production of the GOOSE and GOAT vowels. Milwaukee provides another case. By some measures, Milwaukee is the most segregated city in the US, and discriminatory practice in mortgage lending continues today (NCR 2016). Purnell (2009) studies speech from African Americans in predominantly African American neighbourhoods, as well as some from predominantly white neighbourhoods. He finds that African Americans from the African American neighbourhoods of Milwaukee converge less, particularly in diphthongs like PRICE, with whites in interethnic conversations than African Americans from white neighbourhoods, who presumably have integrated social networks.

Because each of these apparent counter-examples involve speakers with integrated social networks, it appears that these studies rather serve as exceptions that prove the rule. Speakers with integrated networks display convergence despite residential segregation. However, even the above studies show that ethnic divergence occurs in these cities when social networks are monoethnic. In some respects, these findings represent a truism: social networks play an important role for patterns of variation. However, this overlooks the link between housing policy and segregation. The point of instituting residential segregation through policy is to create conditions which avoid the occurrence of integrated social networks by implementing barriers to interethnic contact. Given this, multiethnic networks in such cities are the product of exceptional efforts to break past these barriers and have such a social network. This means that within a segregated city, the norm is segregated networks, and thus, divergence. The role of policy in influencing what kinds of social networks are likely to arise should not be discounted, despite the attested examples of multiethnic networks.

5 Looking Ahead

Collectively, the studies reviewed above show a strong relation between residential segregation and the development of patterns of ethnolinguistic variation. Hypersegregated groups tend towards divergence, while less-segregated groups are more likely to converge in their use of linguistic features. We additionally see that in cases where the degree of segregation has changed over time, the pattern of ethnolinguistic variation has as well. We thus have strong evidence for accepting the RSH. By extension, because there is a fundamental link between segregation and state housing policy, we have strong evidence for accepting the RSH's corollary. That the RSH is valid is not surprising; it has a strong theoretical basis given the role of segregation in reducing contact and communication between ethnic groups. The implications of the RSH's corollary merit some discussion. Essentially, the role of the state in creating residential segregation means

that housing policy indirectly influences patterns of variation. Evidence that the degree of segregation is related to patterns of ethnolinguistic variation is thus evidence for considering housing policy to be an *indirect language policy*. The effect of such policies is certainly less evident than the effects of what I term *direct language policy*, that is, policies that refer to language use in education, media, and other settings. Unlike such direct policies, housing policy does not explicitly regulate language use. By creating conditions of residential segregation which reduce interethnic contact and lessen the likelihood of multiethnic social networks, housing policy nevertheless amounts to regulation of language use, as we have seen. This finding suggests that researchers who study language policy should broaden their approach to the field, as state policies not explicitly about language may still influence language use indirectly.

At the same time, these results suggest that there are connections to be made between the study of language policy and that of variationist sociolinguistics. From a variationist perspective, the underlying conditions created by language policy, both direct and indirect, should be considered when searching for potential factors influencing linguistic variation. This carries methodological implications: many variationist studies stratify speakers by demographic categories. Rather than do so based solely on demographics, such studies should consider stratifying by patterns created by a given policy. In the case of ethnolinguistic variation, for example, variationist studies should stratify speakers by housing patterns rather than ethnicity alone. This is generalisable; state policies may segregate the population by class or other categories, and indirect language policies may extend beyond housing. In such a generalized case, we would expect that language change in spaces with policies that lead to high degrees of segregation based on any other category will yield divergence between groups, just as we find for ethnicity. From a policy perspective, variationist methodologies may help in determining the effects of a given policy on language use, or indeed, whether a policy not explicitly about language constitutes indirect language policy.

Such connections may also assist in determining the limits to the impact that language policy has on speakers. For example, the communities of practice model (Eckert and McConnell-Ginet 1992), which emphasizes social meaning in linguistic variation, relies on regular interaction between participants, a joint practice, and shared linguistic resources between participants (Holmes and Meyerhoff 1999). On one hand, the residential segregation of cities suggests that when conducting studies within this framework, we must consider not only who is a member of a community of practice, but who can become a member in the first place. A racially-exclusive neighbourhood, for example, precludes the existence of an integrated neighbourhood association. A study of such a group's linguistic practice within the communities of practice model should take this fact into account.

On the other hand, the role that identity and speaker agency play entails that even in segregated cities in which levels of segregation suggest African American/white divergence, identity may play a role in limiting the indirect effect of policy. I illustrate this with a final pair of examples. Memphis is a highly segregated city, and as such we find African American/white divergence. However, Fridland (2003) finds convergence in these groups' production of the PRICE vowel, a widely-stereotyped feature of the Southern US. She attributes this finding to a shared Southern identity. Similarly, Anderson's (2008) study of Detroit finds that neither African American nor Appalachian white migrants to the city adopt the NCS. Although these groups are divergent in several features in the South, they converge in their use of them in Detroit. Anderson suggests this is because while the groups are situated oppositionally in Appalachia, they both are oppositional to Northern whites in Detroit and draw on the same linguistic

resources to illustrate the contrast. Variationist research focusing on identity and speaker agency supplements, rather than invalidates, the assessment of the role of residential segregation and racist policies in variation. This role must not be discounted: as found throughout this survey, the RSH is strongly supported, suggesting that policies inducing residential segregation greatly affect patterns of ethnolinguistic variation. However, like mixed social networks, identity may be able to blunt the effect of indirect language policies like those concerning housing.

6 Conclusion

The goal of this paper is twofold: to illustrate the validity of the RSH, and to argue for the existence of indirect language policies, which can regulate language use without explicitly referring to language. As reviewed, state policy is a major contributing factor to residential segregation, which has a strong effect on patterns of ethnolinguistic variation by limiting interethnic contact and reducing opportunities for multiethnic social networks to arise. In highly segregated spaces, particularly hypersegregated spaces, ethnic groups diverge in their use of linguistic features, while in less segregated spaces, groups converge. The degree of segregation is thus an underlying condition which influences patterns of linguistic variation and change; because state policy affects the degree of segregation, this means that we have evidence that housing policy may constitute language policy. This is a large-scale trend, and the strength of such policy may be diminished by mixed social networks or speaker identity. This indirect effect entailed by the results highlighted in this review show that language policy and variationist sociolinguistics have room for cross-pollination. More research, therefore, is needed into their interface.

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References

- Abrams, C. (1955) *Forbidden Neighbors: A Study of Prejudice in Housing*. Port Washington, NY: Kennikat Press.
- Anderson, B. (2008) *Migration, Accommodation, and Language Change: At the Intersection of Regional and Ethnic Identity*. New York, NY: Palgrave Macmillan Press.
- Ashton, P. J. (1984) Urbanization and the dynamic of suburban development under capitalism. In W.K. Tabb and L. Sawers (eds.) *Marxism and the Metropolis: New Perspectives in Urban Political Economy* 54--81. Oxford: Oxford University Press.
- Becker, K. (2010) Regional Dialect Features on the Lower East Side of New York City: Sociophonetics, Ethnicity, and Identity. New York: New York University dissertation.
- Blake, R. and Shousterman, C. (2010) Diachrony and AAE: St. Louis, hip-hop, and sound change outside of the mainstream. *Journal of English Linguistics* 38: 230--47.
- Boberg, C. (2014) Ethnic divergence in Montreal English. *Canadian Journal of Linguistics* 59(1): 55--82.
- Eberhardt, M. (2008) The low-back merger in the Steel City: African American English in Pittsburgh. *American Speech* 83(3) 284--311.
- Eberhardt, M. (2012) Enregisterment of Pittsburghese and the local African American community. *Language and Communication* 32: 358--71.

- Eckert, P. and McConnell-Ginet, S. (1992) Think practically and look locally: Language and gender as community-based practice. *Annual Review of Anthropology* 21: 461--90.
- Fix, S. (2011) 'Dark-Skinned White Girls': Linguistic and Ideological Variation among White Women with African American Ties in the Urban Midwest. New York: New York University dissertation.
- Fridland, V. (2003) 'Tie, tied and tight': The expansion of /ai/ monophthongization in African-American and European-American speech in Memphis, Tennessee. *Journal of Sociolinguistics* 7(3): 279--98.
- Galster, G.C. (1986) More than skin deep: The effect of housing discrimination on the extent and pattern of segregation in the U.S. In J. Goering (ed.) *Housing desegregation and federal policy* 119--138. Chapel Hill, NC: UNC Press.
- Goodheart, J. C. (2004) I'm No Hoosier: Evidence of the Northern Cities Shift in St. Louis, Missouri. East Lansing, MI: Michigan State University MA thesis.
- Gordon, C. (2008) *Mapping Decline: St. Louis and the Fate of the American City*. Philadelphia: University of Pennsylvania Press.
- Gumperz, J. (1962/1993) Types of linguistic communities. *Anthropological Linguistics* 35(1): 130--142.
- Hall-Lew, L. (2010) Ethnicity and sociolinguistic variation in San Francisco. *Language and Linguistics Compass* 4(7): 458--72.
- Hinton, L. N. and Pollock, K. E. (2000) Regional variations in the phonological characteristics of African American Vernacular English. *World Englishes* 19(1): 59--71.
- Holmes, J. and Meyerhoff, M. (1999) The community of practice: Theories and methodologies in language and gender research. *Language in Society* 28(2): 173--83.
- Jackson, K. T. (1980) Race, ethnicity, and real estate appraisal: The Home Owners Loan Corporation and the Federal Housing Administration. *Journal of Urban History* 6: 419--52.
- Johnstone, B. (2009) Pittsburghese shirts: commodification and the enregisterment of an urban dialect. *American Speech* 84(2): 157--75.
- Kerswill, P. (1993) Rural dialect speakers in an urban speech community: the role of dialect contact in defining a sociolinguistic concept. *International Journal of Applied Linguistics* 3(1): 33--56.
- Kerswill, P. and Williams, A. (2000) Creating a New Town koine: Children and language change in Milton Keynes. *Language in Society* 29(1): 65--115.
- Kohn, M. (2016) (De)Segregation: The impact of de-facto and de-jure segregation on African American English in the New South. In *LAVIS IV: Language Variety in the South*. Chapel Hill, NC: UNC Press.
- Kohn, M., Dickens, A. and Garcia, T. (2016) A New Majority: Latinx English and the Third Vowel Shift in Liberal, Kansas. Paper presented at NWAV 45, Simon Fraser University.
- Labov, W. (1966/2006) *The Social Stratification of English in New York City*. Cambridge: Cambridge University Press.
- Labov, W. (1989) Exact description of the speech community: Short a in Philadelphia. In R. Fasold and D. Schiffrin (eds.) *Language variation and change* 3--57. Amsterdam: John Benjamins.
- Labov, W. (1994) *Principles of Linguistic Change Volume 1: Internal Factors*. Oxford: Blackwell Publishers.

- Labov, W. (2014) The role of African-Americans in Philadelphia sound change. *Language Variation and Change* 26: 1--19.
- Labov, W., Ash, S., and Boberg, C. (2006) *The atlas of North American English*. New York: Mouton de Gruyter.
- Labov, W., Rosenfelder, I. and Fruehwald, J. (2013) One hundred years of sound change in Philadelphia: Linear incrementation, reversal, and reanalysis. *Language* 89(1): 30--65.
- Lee, J. (2016) The participation of a northern New Jersey Korean American community in local and national language variation. *American Speech* 91(3): 327--60.
- Lee, S. (2016) *Phonetic Variation in Washington, DC: Race, Neighborhood, and Gender*. Washington: Georgetown University dissertation.
- Lipsitz, G. (1995) The possessive investment in Whiteness: Racialized social democracy and the 'White' problem in American studies. *American Quarterly* 47(3): 369--87.
- Massey, D. S. and Denton, N. A. (1989) Hypersegregation in US metropolitan areas: Black and Hispanic segregation along five dimensions. *Demography* 26(3): 373--91.
- Massey, D. S. and Denton, N. A. (2010) The continuing causes of segregation. In G. Bridge and S. Watson (eds.) *The Blackwell city reader* 177--85. Oxford: Blackwell.
- Massey, D.S. and Tannen, J. (2015) A research note on trends in black hypersegregation. *Demography* 52(3): 1025--1034.
- Milroy, J. and Milroy, L. (1985) Linguistic change, social network and speaker innovation. *Journal of Linguistics* 21(2): 339--384.
- Milroy, L. (1987) *Language and social networks*. New York: Wiley.
- Milroy, L. and Milroy, J. (1992) Social network and social class: Toward an integrated sociolinguistic model. *Language in Society* 21: 1--26.
- Muehlmann, S. (2014) The speech community and beyond. In N.J. Enfield, P. Kockelman, and J. Sidnell (eds.) *The Cambridge handbook of linguistic anthropology* 578--98. Cambridge: Cambridge University Press.
- Murray, T. E. (2002) Language variation and change in the urban Midwest: The case of St. Louis, Missouri. *Language Variation and Change* 14: 347--61.
- NCRC. (2016) *Home Mortgage Lending in St. Louis, Milwaukee, Minneapolis and Surrounding Areas*. Washington: NCRC.
- Patrick, P. (2002) The Speech Community. In J.K. Chambers, P. Trudgill and N. Schilling-Estes (eds.) *The Oxford Handbook of Language Variation and Change* 573--97. Oxford: Blackwell.
- Purnell, T. C. (2009) Convergence and contact in Milwaukee: Evidence from select African American and White vowel space features. *Journal of Language and Social Psychology* 28(4): 408--27.
- Purnell, T., Idsardi, W. and Baugh, J. (1999) Perceptual and phonetic experiments on American English dialect identification. *Journal of Language and Social Psychology* 18(1): 10--30.
- Roeder, R. V. (2010) Northern cities Mexican American English: Vowel production and perception. *American Speech* 85(2): 163--84.
- Silver, C. (1996) The racial origins of zoning in American cities. In J. M. Thomas and M. Ritzdorf (eds.) *Urban Planning and the African American Community: In the Shadows* 23--42. Los Angeles: SAGE Publications.
- van Herk, G. (2008) Fear of a Black phonology: The Northern Cities Shift as linguistic White Flight. *University of Pennsylvania Working Papers in Linguistics* 14(2): 157--61.

- Wiese, A. (2004) *Places of their own: African American suburbanization in the 20th century*. Chicago: University of Chicago Press.
- Wirth, L. (1938) Urbanism as a way of life. *The American Journal of Sociology*, 44(1): 1--24.
- Yaeger-Dror, M. and Thomas, E. (eds.). (2010) *PADS 94: AAE Speakers and Local Sound Changes*, Durham, NC: Duke University Press.