present selected findings of analysis of 2008 Annual School Census (ASC) data for the capital to quantify and map the languages spoken in contemporary London, updating Baker and Eversley’s work and showing how the situation has changed. We show how an analysis of language rather than ethnicity alone can shed new light on patterns of educational inequality.

Key Findings

- Although around 60% of London pupils are English speakers, there are over 40 languages spoken by more than 1,000 pupils. Bengali, Urdu and Somali are the top three languages spoken in London, other than the English language.

- English has a ‘doughnut’ shaped geographical distribution in London, being the predominant language in most of Outer London. Languages other than English are more common in Inner London. Most minority languages, such as Bengali, Urdu and Turkish, have one, two or three main clusters, reflected settled immigrant communities. However others, notably Somali, are widely dispersed. This has implications for service provision.

- Some of the ethnic categories that are widely used in analysis of census data hide substantial linguistic diversity, particularly ‘Black African’ and ‘White Other’. Within London, where these groups are numerous, language data provides a valuable disaggregation of these heterogeneous groups.

- Language spoken provides a means to better understand the relationship between ethnicity and educational performance.
Data, language classification and geography

Our analysis draws on data from the Annual School Census in 2008. This covers pupils in all state schools, but not private schools. Around 1.1 million pupils are represented in the dataset. The data collection instrument provides a list of 322 languages, of which some are variants of other languages. For example, a person may be classified as speaking Bengali (main category) or Bengali (Sylheti) or Bengali (Chittagong/Noakhali) or Bengali (any other). This structure provides some inconsistencies as different local authorities have collected data at different levels — some using main categories only and some using variants — and for this reason, analysis of the variants is not reliable. Furthermore, there are even less detailed categories such as ‘believed to be English’ and ‘other than English’. For London as a whole, 7% of records have this insufficiency of language detail and there are tiny percentages of refusals and missing values (in total 1.4%). However, at borough level, the ambiguity can range from 2.3% (Ealing) to 27.9% (Westminster). Clearly data quality issues need to be addressed if the data are to enable sophisticated analysis of change over time.

We classify languages based primarily on their location in the world (Dalby, 1999). Eight ‘geozones’ are identified, as follows: Asia (South), Asia (East), Asia (West/central), Africa (North), Africa (West), Africa (East/Central/South), European Union and Other Europe. In addition, the classification includes a category ‘international/transnational’, incorporating the major languages of Arabic, French, Portuguese and Spanish, which are spoken in many parts of the world, as well as ‘other’ languages. Figure 1 shows this classification, highlighting languages which are spoken by more than 5,000 pupils in London’s state schools.

We use postcode data for individual pupils in the Annual School Census to assign all records to Super Output Areas (SOAs) (Vickers and Rees, 2007), which themselves exist in varying levels of aggregation, i.e. ‘lower’ with around 1,500 residents and ‘middle’ consisting of around 7,500 residents known respectively as LSOAs and MSOAs. This enables us to map languages by the home address of pupils, whereas Baker and Eversley were previously only able to calculate figures at borough level based on the location of the school attended. For the London-wide maps that follow, we show only data for London’s 983 MSOAs. We show numbers of pupils rather than percentages, given the unevenness of the data quality (denominators) across the boroughs. For each language, five categories are shown. It is important to note, therefore that the scales for the maps are different to one another. The primary purpose is to show the geographical distribution of each language, not to compare volumes.

Patterns or clustering of language

English speakers, including a small percentage classified as ‘believed to be English’, (<1%), represent over 60% of state pupils in London (663,584 in total). No other language is spoken by more than 5% of all pupils with a recorded language, and over 40 languages are spoken by more than 1,000 pupils — a picture of remarkable diversity. The 15 most prevalent languages other than English are shown in Table 1. Column 1 shows the ordering of languages in 1999 from Baker and Eversley (2000). The table indicates that while overall there has been little change in the relative importance of languages spoken in the nine years since 1999, there are some differences. Notably, Somali speakers have become more prevalent along with Tamil speakers which may well represent recent turmoil in their countries of origin. Polish and Albanian speakers appear in the 2008 rankings for the first time in comparison to Greek, Cantonese and Creole speakers, possibly reflecting recent expansion in EU membership.

Maps of individual languages demonstrate patterns of settlement and dispersal of minority communities and provide a basis for understanding how these patterns change between Censuses of Population. Figure 2 clearly shows a doughnut pattern, with English speaking pupils found more in outer London (particularly in the East and

FIGURE 1. A CLASSIFICATION OF LANGUAGES

≥5000 pupils
Minority language speakers tend to be concentrated in particular parts of the city. For example, Bengali speakers are heavily concentrated in Tower Hamlets, and Urdu speakers in three main areas: the neighbouring boroughs of Newham, Redbridge and Waltham Forest, Ealing/Hounslow and Merton/Wandsworth (Figure 3). However, note the much more dispersed distribution of Somali speakers (a similar size population overall to Urdu speakers) (Figure 4). Similar language maps can be found in the new edition of *Multilingual Capital* (Tinsley et al., 2010).

**Language and ethnicity**

While many languages ‘attach’ to particular ethnic groups, there are others (those that we have classified as ‘international’) for which knowing a person’s language does not tell us about their country of origin or ethnic heritage. Data on ethnicity, using the 16 major ethnic categories used in the Census of Population, is also collected in the Annual School Census. This reveals that 57% of French speaking pupils are ‘Black’ and a similar percentage of Arabic speakers are classified as ‘Other Black’ (15%), Mixed (10%), White (9%) or Asian (8%). This suggests the need to analyse language and ethnicity data in these cases to understand the nuances of people’s circumstances and needs. Notably these different populations have different geographical concentrations. White French speakers tend to reside in West London, Black French speakers in East London.

Correspondingly, language data can potentially offer a finer-grained understanding than has to date been available through the collection of ethnic categories. Some ethnic groups are characterised by considerable linguistic homogeneity. For example, 84% of pupils identified as

<table>
<thead>
<tr>
<th>Rank</th>
<th>Year 1999</th>
<th>Year 2008</th>
<th>Number 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bengali and Sylheti</td>
<td>Bengali</td>
<td>46,681</td>
</tr>
<tr>
<td>2.</td>
<td>Panjabi</td>
<td>Urdu</td>
<td>29,354</td>
</tr>
<tr>
<td>3.</td>
<td>Gujarati</td>
<td>Somali</td>
<td>27,126</td>
</tr>
<tr>
<td>4.</td>
<td>Hindu/Urdu</td>
<td>Panjabi</td>
<td>20,998</td>
</tr>
<tr>
<td>5.</td>
<td>Turkish</td>
<td>Gujarati</td>
<td>19,572</td>
</tr>
<tr>
<td>6.</td>
<td>Arabic</td>
<td>Arabic</td>
<td>19,378</td>
</tr>
<tr>
<td>7.</td>
<td>English based Creoles</td>
<td>Turkish</td>
<td>16,778</td>
</tr>
<tr>
<td>8.</td>
<td>Yoruba</td>
<td>Tamil</td>
<td>16,386</td>
</tr>
<tr>
<td>9.</td>
<td>Somali</td>
<td>Yoruba</td>
<td>13,961</td>
</tr>
<tr>
<td>10.</td>
<td>Cantonese</td>
<td>French</td>
<td>13,020</td>
</tr>
<tr>
<td>11.</td>
<td>Greek</td>
<td>Portuguese</td>
<td>11,915</td>
</tr>
<tr>
<td>12.</td>
<td>Akan</td>
<td>Polish</td>
<td>10,991</td>
</tr>
<tr>
<td>13.</td>
<td>Portuguese</td>
<td>Spanish</td>
<td>8,647</td>
</tr>
<tr>
<td>14.</td>
<td>French</td>
<td>Albanian/Shqip</td>
<td>8,380</td>
</tr>
<tr>
<td>15.</td>
<td>Spanish</td>
<td>Akan</td>
<td>8,117</td>
</tr>
</tbody>
</table>

**TABLE 1. THE ‘TOP 15’ LANGUAGES SPOKEN OTHER THAN ENGLISH IN LONDON**

Bangladeshi in London speak Bengali at home (with a further 12% categorized loosely as ‘other than English’, of which some will be Bengali speakers). 98% of White British and 95% of Black Caribbean children speak English at home. However, other ethnic groups are very linguistically diverse, most notably ‘Black African’ and ‘White Other’. Around 30% of Black Africans speak English.
at home, 20% Somali, 9% Yoruba, 6% Akan, 5% French, 2% Lingala, 2% Igbo and 2% Arabic. There are 179 other languages spoken by fewer than 2% of each of the London’s Black African pupils.

The main African languages spoken in London originate in different parts of the continent. Yoruba, Igbo and Akan are spoken mainly in West Africa, including Nigeria and Ghana. Lingala is spoken in Central Africa. Among the ‘Other White’ ethnic group, Turkish (14%) is the most common language, but 10% speak Polish, 8% Albanian or Shqip, 6% Portuguese, and 3% each Lithuanian, Greek and Spanish. ‘Indian’ is also a linguistically diverse category, with two major groups in Gujerati (29%) and Panjabi (22.6%), as well as Hindi, Urdu, Tamil and Malayalam speakers. For these heterogeneous groups, the collection of data on language provides an opportunity for finer grained understanding of who is living in London and their socio-economic circumstances, and how these are changing over time.

Language and attainment
The usefulness of ethnic/language categories is demonstrated by a preliminary analysis of educational attainment data. Here, for simplicity, we concentrate only on results at Key Stage 2 (age 11). Using a 16 category classification (DMAG, 2003; 2005) for ethnicity we see considerable differences between ethnic groups (Figure 6). Pupils of Chinese ethnicity are on average the highest attainers, with a median of 15.38 points. Black Caribbean, Black Other and Black African pupils are the lowest attainers, with medians of 13.55, 13.67 and 13.73 respectively. Groups that are predominantly English-speaking appear throughout this distribution, from Black Caribbean at the bottom to White British and White Irish near the top.

Figure 5 highlights the wide distribution of scores within each ethnic group. The solid boxes in the chart show the 25th and 75th percentiles for each group, while the ‘whiskers’ show the range of attainment beyond this. Most groups have a gap of about 2.5 points between the 25th and 75th percentiles (slightly wider for the ‘White Other’ and ‘Other’ categories. However there are very high attaining pupils in all groups.

Figure 6 and Table 2 illuminate the spread of attainment within the two ethnic categories which had the greatest linguistic diversity — White Other and Black African. Within White Other, five groups have particular low attainment. Median scores for Turkish, Portuguese, Lithuanian and Polish speakers (as well as people whose language is classified as ‘Other than English’) would put them at the bottom of the distribution in Figure 5. While there are high attainers in these groups, there are also long tails of low achievement. By contrast, Italian, Greek and English speakers in the White Other ethnic category have few low attainers and median scores that place them close to the top of the overall distribution. Attainment patterns for White Greek speakers are similar to those of people who identify as having Indians ethnicity (a median of around 14.6 points).

Language, ethnicity and socio-economic circumstances
These data give no indication that language itself is responsible for greater or lesser attainment. It is necessary to consider the different socio-economic circumstances and migration histories of people who have come to London at different times and from different parts of the world. The

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ASC data only contains limited fields of data on socio-economic circumstances namely, whether or not a pupil receives free school meals (FSM) and an index of deprivation describing the pupil’s residential neighbourhood (IDACI). To enrich our understanding of the circumstances of different ethno-linguistic groups, we are able to match and merge the ASC data on data for the London Borough of Newham with data for that borough previously matched by our consultants, Mayhew Harper Associates Ltd (2009).

At a local authority level, data records are linked together via a property gazetteer using the General Practice registers as a base for reference. Addresses are cross-referenced and checked as to whom is present using various logical assumptions to include or exclude people.

Analysis of these data shows that, for Newham at least, there are marked differences in socio-economic circumstances within language and ethnic groups, which may well be driving attainment patterns (Table 3). On both poverty indicators FSM and whether the family is in receipt of Council Tax Benefit (CTB) Black African Somalis are by far the most disadvantaged group. They also have the highest proportion of single parent families and larger families. Other ethno-linguistic groups with large families tend to have low proportions of single parents, and vice versa. Ethnicity alone certainly gives a misleading picture. Yoruba speakers are relatively advantaged on these measures, in great contrast to Somalis. On the other hand, considering language alone would also be inadequate. White British English speakers in Newham appear more disadvantaged than Black Caribbean English speakers, and Pakistani Panjabi speakers more disadvantaged than Indian Panjabi speakers.

**Next steps**

These findings highlight the potential of the ASC language data to help disaggregate Census ethnic categories and give greater insight into the geographic distribution and socio-economic circumstances of different ethno-linguistic communities. Annual analysis of the data could provide a vital inter-censal picture of settlement and migration, providing that data is consistently and accurately collected.

The ASC remains a state school exercise. In some parts of England and Wales and specifically in London, this is a significant gap. For example, in Kensington and Chelsea less than 50% of children are believed to attend local state secondary schools. Some may attend state schools in neighbouring areas. This is a reason for seeking to do regional rather than local studies. The existence of specialist private schools for speakers of other languages such as the Lycee Francaise or the German School in South West London may lead to specific gaps in the data but in...
The high percentage of children who do attend state schools makes the ASC an invaluable source of data. The richer insight that can be gained by matching the ASC data to other local administrative data is clearly shown by Table 3. In practice, negotiating access to the data presents a major challenge both ethically and technically as well as the need to ensure data security and confidentiality. At least three agencies or providers are involved, the DCFS, the Primary Care Trust and the local authority. As a result a fundamental component of our project has been to test the viability and value of such an exercise in the context of a single London borough namely, Newham.

Finally, in this document we have concentrated on description only. A key question is whether the attainment patterns of different linguistic groups can be entirely explained by their socio-economic position, or whether language (in itself or as a marker of previous circumstances and experiences) has explanatory power in attainment. We will be exploring this further using more advanced statistical techniques and both KS2 and KS4 data.

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