

The Dynamics of Contacts and Multilingual Practices in the Chinese Community in Britain: Revisiting Social Network Analysis

Li Wei

UCL Institute of Education, University College London, UK

li.wei@ucl.ac.uk

Abstract

This article revisits the application of Social Network Analysis to the study of language maintenance and language shift in the Chinese community in Britain. An approach that focuses more on individual variations, including variable behaviours by the same speaker in different contexts, is proposed. The approach is illustrated with new data from Chinese-speaking families in London. The role of the social media in language maintenance and language shift, and in promoting multilingual practices is explored.

Keywords: Social Network Analysis, Chinese in Britain, language maintenance and language shift, social media

The Chinese community in Britain is one of the longest established immigrant communities in the country, and the third largest non-European ethnic minority group according to the UK national census classification, after the Black, African, Caribbean group and the very diverse Asian group comprising of Indian, Pakistani, Bangladeshi and other communities. The British Chinese live in dispersed areas, rather than having a concentrated settlement pattern. They are typically seen as economically independent and educationally successfully. In the late 1980s I and a team of researchers carried out a series of sociolinguistics projects examining the language practices of the British Chinese community, using the Cantonese speaking community with Hong Kong connections in the North East of England as a case in point (Li Wei, 1994). We discovered what seemed to be a rather rapid intergenerational language shift from monolingual Chinese practices to English-dominant bilingual practices in the community. Under the guidance of Lesley Milroy, we applied Social Network Analysis to explain the patterns of language shift thus discovered (Li Wei 2000). We further argued that there were network specific interactional patterns in terms of the amount and type of code-switching between Cantonese and English by different generations of Chinese community (Milroy and Li, 1995; Li Wei, 1992, 1995). Later, I looked at the Hakka-speakers in the North East of England and discovered a similar but more gendered pattern of language shift, with women shift more to Cantonese and men to English (Li Wei, 1997). We also applied Social Network Analysis to studying the British-born Chinese children's learning and use of Cantonese and English (Raschka, Li and Lee, 2002) and found it a useful tool in understanding variations between individual speakers. On the whole, however, we used Social Network Analysis to investigate patterns of change across generations rather than comparing the variations between individual speakers. In this article, I revisit the way we carried out Social Network Analysis in our 1980s studies. The Chinese community in Britain, like all other immigrant communities, has gone through significant social changes in the last thirty years. We need different approaches from the ones of our 1980s studies in order to understand the dynamics of language practices in the community. I will propose an approach to Social Network Analysis that focuses more on individual variations, including variable behaviours by the same speaker in different contexts. I will illustrate this approach with new data that we have

gathered from Chinese-speaking families in London. Moreover, I will discuss the role of the social media in language maintenance and language shift, and in promoting multilingual practices. This kind of social networking was not considered in our earlier Social Network Analysis. But I will argue that it is worth considering in future studies of language maintenance and language shift.

The article is structured as follows: I first review Social Network Analysis in linguistic studies and explain the principles of the method. I then summarise the studies I did in the 1980s. It is followed with a discussion of the key changes in the sociolinguistic situation of the Chinese community in Britain. The core of the paper is to present data from a family ethnography of the dynamic multilingual practices of the individuals concerned and show how Social Network Analysis is done that is different from the 1980s studies. I then discuss the role of social networking via digital media. Key findings and methodological developments are summarised in the concluding section.

Social Network Analysis in linguistic studies

Space limit does not permit a detailed discussion of the various approaches of Social Network Analysis. Basically a social network is a web-like structure of relationships among agents, who can be individuals or institutions. Most social network studies focus on individuals' social contacts, i.e. interpersonal relationships. But institutional networks are studied in the fields of business management, politics and organizational psychology. Social Network Analysis is essentially a quantitative method of examining the structure of such relationships, i.e. who is connected to whom, in what way, for what purpose, etc. and what impact the structuring of the social network has on the behaviours of the network members. Broadly speaking, there are two schools of Social Networks Analysis: one that originated from the Chicago and later Harvard schools of structural sociology and social psychology, particularly sociometry (as exemplified in the work of Harrison White, Barry Wellman, S. D. Berkowitz, and Mark Granovetter) and the other in the Manchester school of cultural anthropology (associated with the work of J. A. Barnes, Clyde Mitchell, and Elizabeth Bott) (see further Scott, 2012). The former is often described as the 'sociological' approach to Social Network Analysis and the latter the 'anthropological' approach, which in turn are distinguished in terms of the so-called 'whole-network' (sociological) approach and the 'egocentric' or 'personal' network (anthropological) approaches. But both approaches focus on the quantitative measurement of relationships between people: the whole-network approach focusing on the overall structure of the network and the personal network approach on the profile (size and content) of the ties. For example, the Harvard group's main contribution was the development of mathematical models of network analysis, in which concepts such as equivalence and centrality were the most important, whereas the Manchester group was more interested in the effect of integration into a group on individuals' behaviours and attitudes.

Social Network Analysis has been applied to a wide range of disciplines. In linguistics, it has been used as a way of explaining variation and change, and essentially follows the argument that has been made by social network analysts that strong and close-knit social network ties are a norm enforcement mechanism, i.e. members of a close-knit network tend to behave similarly in order to maintain their membership of the group, whereas close and open networks lead to variation and change in language use. Examples of the application of the whole-network approach in the study of linguistic variation and change include the classic

Labovian (1972) study of Black teenagers in Harlem, New York City, and Eckert's (2000) study of Detroit teenagers' communities of practice, as well as the more recent studies by Lev-Ari (2016), who analyzed the effect of network size on lexical access from a psycholinguistic perspective, and Tribur (2017), who examined the role of network structures in dialectal diversity in Amdo Tibetan. Fagyal et al. (2010) developed a computational model to investigate the emergence of norms in simulated networks of linguistic influence. Perhaps the best known linguistic application of Social Network Analysis is Milroy's (1987) study of phonological variation and change in three working class communities in Belfast, Northern Ireland. Instead of looking at whole network structures, Milroy focused on individuals' network ties, and the roles of such ties in speakers' use of phonological variants. In practical terms, Milroy identified a speaker of interest as the anchor person and observed the network contacts that person had for different social purposes. Milroy (1987) developed a Network Strength Scale, which quantifies speakers' network characteristics with reference to various relationships of kin, work, and friendship (see details in Milroy and Gordon 2003: 121).

One of the pressing social issues that social network analysts have been dealing with in the past two decades or so has been migration. As Ryan and D'Angelo (2018) and Wissink and Mazzucto (2018) demonstrate, Social Network Analysis offers a practical and insightful tool for studying migration networks and the subsequent integration of migrants into their new place of settlement. An earlier classic of sociolinguistic applications of Social Network Analysis in migration contexts was Gal's (1979) study of language shift in Oberwart, a village on the Austrian-Hungarian border. German-Hungarian bilingualism has existed in Oberwart since before the 16th century. However, the two languages were functionally quite different: German was a language to be used with outsiders, and Hungarian was the linguistic symbol of group identity for the Oberwart peasants. This state of affairs began to change after the Second World War, when local the industrial and commercial economy developed so significantly that nonagricultural employment was an increasingly attractive option. Gal found a parallel language shift from Hungarian-dominant bilingualism to German-dominant bilingualism. She ranked individual speakers according to their degree of 'urbanization' or 'Austrianness', and observed a strong correlation between their language choice patterns and social network contacts. More recent examples of the role of social networks and the linguistic consequences of migration can be found in a special issue of the *Journal of Sociolinguistics* edited by Milroy (2002), and in Cheshire et al. (2011) and Sharma (2017).

The 1980s studies of language maintenance and language shift in the British Chinese community

Our 1980s studies of language choice and language shift in three-generation Chinese families in the UK followed the 'anthropological' approach to Social Network Analysis and the Milroy's model of focussing on individuals of interest as anchorpersons and their personal ties. But instead of examining the morphology of their networks, I was especially interested in the contents of the ties and collected data on the ethnic and peer group composition in three different types of networks: exchange, interactive (also called 'interactional'), and 'passive' networks. Exchange networks are collectives of people with whom the probability of rewarding exchanges (or unrewarding exchanges, in cases of conflict-habituated relationships) is high (Milardo 1988). In other words, these are the

people with whom the ego not only interacts routinely, but also exchanges direct aid, advice, and support, as well as criticism and interference. Although in principle an individual's social networks can be infinite, empirical evidence suggests that, for practical reasons, exchange networks are effectively limited to first order contacts, which normally number between 20 and 30 people (Mitchell 1986). Interactive networks, on the other hand, consist of people with whom the ego interacts frequently, and perhaps over prolonged periods of time, but crucially, the probability of rewarding exchanges is low, that is, the ego does not rely on these contacts for personal favours and other material (or symbolic) resources. An example of interactive ties would be a shop owner and his or her customers. Finally, we felt that the identification of 'passive' networks was particularly useful for studying migrant communities. 'Passive' ties are marked by an absence of regular contact, but are equally considered important by the ego, who depends on such relationships for sentimental and moral support or for influence. Many migrants, for example, would have relatives and friends who, for various reasons, are physically distant from them, but who are still regarded as important relations. Migrants often cling psychologically to their traditional ties, despite the passage of time. Passive ties can be 'activated' through home visits and other interactions.

Li Wei (1994) presented a detailed analysis of the social network ties of 58 individuals in the Chinese community in Tyneside, in the north east of England. For the exchange networks, participant observation elicited an initial list of around 30 contacts per individual. The list was then presented to the speakers for verification, and revised accordingly. A resulting 20 non-kin contacts were used as the basis for analyzing individual speakers' exchange networks. In order to examine individuals' degree of social integration, two network indices were constructed: an ethnic index, which was calculated in terms of the number of Chinese versus non-Chinese ties out of the 20 exchange contacts for each speaker, and a peer index, reflecting the number of people belonging to the same generation as the speaker (as opposed to those belonging to other generations, whether older or younger). These indices were used to test two basic hypotheses (see further Li Wei 1994: 121–122):

- Speakers whose exchange networks consist of a relatively large number of ethnic (Chinese) ties would display more traditional social behaviour, such as using Chinese dominant language choice patterns, while those with fewer ethnic ties within their exchange networks would have moved away from such traditional patterns and adopted English-oriented behaviour.
- Speakers whose exchange networks consist of a relatively large number of peer ties would display behaviour which conforms to the overall pattern of the generation to which they belong.

Notice here that the indicators used to measure personal networks are different from those used by Gal or Milroy. Milroy (1987: 141) commented on the principles for selecting appropriate network indicators and designing network measures. They must first reflect conditions which have repeatedly been found to be important in a wide range of network studies in predicting the extent to which normative pressures are applied by a local community; and second, they must be recoverable from data collected in the field and be easily verifiable.

In the same vein, we constructed 'ethnic' and 'peer' indices for interactive and 'passive' ties. However, whereas the numbers for the exchange networks indicated specific individuals, those for interactive networks represented proportions. Each speaker was observed to determine how many people there were with whom they routinely interacted without exchange of material and/or moral support; the total number of interactive ties obviously varied. In addition, ten 'passive' ties were analyzed for each speaker in the sample. The percentage of ethnic and peer contacts were then calculated. Using Analysis of Variance (ANOVA), we found that the ethnic index of exchange networks was the best predictor for an individual's language choice patterns: the more Chinese contacts a speaker had in the exchange network, the more likely the speaker was to speak Chinese all the time. The ethnic index also showed a similar pattern in interactive networks, albeit to a lesser extent. However, peer contacts worked in very complex ways: the peer composition of exchange networks contributed to language maintenance *within* generations on the one hand, and to language shift (i.e. from Chinese to English) *across* generations on the other. This was even more true of interactive networks: the more peer-group contacts (members of the same generation) a grandparent had, the more Chinese was used; the more contacts a parent had with members of the grandparent generation, the more Chinese was used, while the more contacts a parent had with members of the child generation, the more bilingual s/he was; and the more peer-group contacts a child had, the more English was used.

Similar findings of the impact of the contents of the network contacts on language maintenance and language shift can be found in Stoessel's (2002) study of immigrant women in the US, Hulsen, de Bot, and Weltens' (2002) study of language shift in three generations of Dutch migrants in New Zealand; Lanza and Svendsen's (2007) study of the Filipino community in Oslo, Norway, Matsumoto's (2010) study of the postcolonial multilingual island of Palau; and Sallabank's (2010) study of endangered language maintenance (and revitalization) of Guernesiais in the Channel Islands. Sharma's (2017) study of the South Asian, especially the Punjabi-speaking, community in London, critically examines the effect of different dimensions of networks on different aspects of language variation. She analyses three dimensions of personal network (ethnicity, nationality, diversity) in relation to three levels of language structure (phonetic form, accent range, language choice) over three generations of speakers. The results indicate a scaling of network influences. The contents and qualities of an individual's ties are more historically and culturally specific, whereas the structure of an individual's social world appears to exert a more general effect on accent repertoires across generations.

Although our 1980s studies used anchorpersons to look at the contents of their network ties, they, and the studies by other scholars that are mentioned above, focused primarily on group differences. That is, we largely focused on generational differences in language choice preferences and revealed an intergenerational language shift at the community level. We did also look at gender differences and other variables such as age of migration to the UK and length of residency. On the whole, we only looked at differences between individuals when there were very clear anomalies between an individual and the group to which they belonged. For example, in Li Wei (1994), two of the male grandparents were found to use a lot more English than other members of their own generation. In fact, their language choice patterns were more typical of the parent generation. When social network contacts were

examined, these two individuals were shown to have significantly more non-Chinese contacts in both their exchange and interactive networks than did their peers. Social Network Analysis has the capacity to compare groups as well as individuals. Individuals' network ties can be very different in terms of composition and size, as well as content and quality. Moreover, individuals normally have multiple networks for different purposes and in different contexts. If we follow through the argument that individuals' behaviours are conditioned by the social networks in which they operate, then more attention should be paid to individual differences of their network contacts. We now turn to our recent and ongoing studies that aim to address this issue more systematically.

The dynamics of social networks and multilingual practices: A new approach

Since the 1980s, new immigrants of the Chinese community are largely from mainland China, compared to the mainly Cantonese-speaking immigrants of the 1960s and 70s from Hong Kong. There are also many secondary immigrants who migrated from China first to Southeast Asia, Australia and New Zealand, Europe and elsewhere, and then migrated to the UK. The majority of those with Hong Kong ties are now well established residents, with a relatively small group of post-1997 (after the return of sovereignty to China) immigrants. The range of Chinese languages spoken within the British Chinese community has been greatly diversified, including not only the key southern varieties of Chinese such as Cantonese and Hakka but also Mandarin, Shanghainese and many other varieties. Putonghua is gradually becoming another community lingua franca together with Cantonese. English has also become a common language of communication both within and beyond the community (Table 1).

Table 1. Polyglossia of the Chinese communities in Britain

	Within the community	Beyond the community
	Cantonese	English
High	(for everyday communication)	(for socioeconomic/educational purposes)
	Pǔtōnghuà /Mandarin	Pǔtōnghuà /Mandarin
	(for political, symbolic purposes but increasingly for everyday communication too)	(for political, symbolic purposes)
Low	regional Chinese varieties or <i>fāngyán</i>	Regional varieties of English

The generational language shift that we discovered in our 1980s studies has continued but increasingly with bilingual and multilingual practices being the norm of the community. We attributed the generational language shift from Chinese to English partly to the settlement pattern of the post-World War II Chinese immigrants in the UK, many of whom were involved in the catering trade. In order to maximise their customer base, they chose to live in different areas rather than in

concentrated neighbourhoods. The later generations of the British Chinese have been very successful in education and employment and they are one of the most socially mobile ethnic groups in the UK. Many families therefore choose to live in affluent neighbourhoods and areas. Increasingly English is used as the main language of interaction both outside the family and inside, especially if the family is made up of the British-born generations. The traditional three-generation-under-one-roof configuration of the early Chinese families in the UK has gradually disappeared. The vast majority of the Chinese families are nuclear families with an average of two children. The elderly Chinese also choose to live separately from their children, though they tend to live in the same city or close-by areas and remain in regular contacts with them.

Two of the three pillars of the community – heritage language school and Chinese language media – remain to be highly significant. The other traditional pillar of the community - the townsmen association - has been replaced by interest groups and activity clubs such as Tai Chi club, chess club, fold opera club, fan dance club, etc. This is in part due to the fact that the British-born generations and secondary immigrants are taking over the community and they do not feel a strong sense of belonging to a particular geographical region of China. In the meantime, there seems to be a renewed awareness of the importance of maintaining the Chinese language. According to informal surveys by the UK Federation of Chinese schools, the number of children attending weekend Chinese classes is around 12,000 in England. The explosion of new social media in Chinese has also had a huge impact on the British Chinese community. Our recent project on family language policy has revealed a very high percentage of individual ownership of multiple digital devices and access to multiple apps and social media platforms.

Let us now look at a particular family as an example of the complex and dynamic changes that are taking place within the British Chinese community. The information given below is gathered as part of a large family ethnography we have undertaken in the last five years or so. Whilst following the same practices and procedures of ethnographic research, family ethnography pays specific attention to the family dynamics: patterns of relating or interacting between family members, distribution of roles and responsibilities within and beyond the family, and connections beyond the immediate family unit. It recognises the family as a major social institution and a locus of much of a person's social activity. Each family has its own dynamics and each member of the family has their own roles and responsibilities. The idea of a family unit changes in accordance with other socio-cultural changes of the society. Nevertheless, a family typically involves two or more generations. A couple without children would be regarded as a couple, but part of the family of their own parents. Family ethnography would be interested in intergenerational relations and changes over time (vertical) as well as relations with others of the same generation and variations in different contexts (horizontal).

A family ethnography: The Hu family

At the time of collecting data (2014), the couple were in their mid-forties. We had known them for several years. Mr Hu comes from the south of China and studied in Guangzhou where Cantonese is the dominant language variety. He also spent nearly two years in Hong Kong. As a result, he has a good knowledge of Cantonese, though it is not his first language. Mrs Hu is from central China, and was educated in Beijing. She knows a number of different regional varieties of Chinese. She also lived in Guangzhou after she got married and continued to do so after their son's birth when Mr Hu worked in Hong Kong. The son was born in Guangzhou and came to Britain with the parents when he was five and a half. He has not lived in Hong Kong. He went to a Chinese complementary school until

GCSE¹ level and passed his Mandarin GCSE at the age of 14. We have seen him talking in fluent Cantonese with other Cantonese speakers. But he did not take any formal examinations in Cantonese. The mother is a human resource manager in a commercial company, and the father works in a national research laboratory as a scientist. Their work-life pattern is very similar, with full-time jobs. On surface their network structures are very similar. But Mr Hu has a number of colleagues who are Chinese and therefore has a lot more opportunities speaking Chinese. He also travels to China more often for collaborative projects. Nonetheless, Mrs Hu has intensive contacts with other Chinese, mainly women, over social media and she is very active in a Chinese mothers' group and they have many different activities over the weekend. The son had started university about seven months before our intensive data collection with the family. He rented a room in a shared house with other students but came home every weekend as it was in London. Table 2 a summary of the linguistic repertoire of the three members of the Hu family.

Table 2. Linguistic repertoire of the Hu family

	Languages spoken	Literacy	Languages known
Mr Hu	Mandarin English Cantonese Other Chinese dialects	Chinese English	
Mrs Hu	Mandarin English Other Chinese dialects	Chinese English	Japanese
Son	English Mandarin Cantonese	English Chinese	French

The languages are listed in the order of the amount we heard them using in either spoken or written form, and the 'languages known' is what they reported to us that they had learned at school or university to a reasonable level of proficiency. But within the family, their linguistic practices are highly multilingual. They mix and switch between English and Mandarin all the time and, between Mr Hu and his son, they also occasionally use some Cantonese words. When asked about their family language policy, here is what Mrs Hu said:

这个根本不能 control. No way. 小的时候我们是希望他多说中文啦，他说。他在国内出生的嘛，来得时候中文没问题啦。我们还担心他的 English not good enough. 后来他上学也没什么问题，我们就说：“你要不要上中文学校呀？”他没有不愿意呀，no，他去了。有很多同学讲广东话，香港人啦。他反正也能听懂，也跟他们讲。我们最担心的是他不认字，能说不能写，can't read. 听说都没问题。你听他讲得怎样？还可以哈？He's alright. 我们也都是 mix 啦嘛！有什么办法。他说：“你们不用英语行吗？我说英语你又不是听不懂！”我们也就顺其自然啦。我们跟朋友，他爸爸和同事，也都是 mix. 写不会 mix, 说就没办法啦。我们也就不管啦，no control, no policy. You can't.

¹ General Certificate of Secondary Education in the UK

'It cannot be controlled. No way. When he was little we wanted him to speak more Chinese. And he did. He was born in China. He had no problem with Chinese when he came here. We were in fact worried that his English was not good enough. But when he started school later, there was no problem. So we asked him, 'Do you want to go to the Chinese school?' He didn't say he didn't want to. No. So he went. There were many children speaking Cantonese. They were Hongkongers. He could understand anyway, and he spoke Cantonese with them. Is was alright, yeah? He's alright. He all mix. What can we do? He says, 'Do you use English too? You can understand me when I speak English, can't you!' We just let it go naturally. When we are with friends and his father with his colleagues, we all mix. We don't mix in writing. When it comes to speaking, we can't do anything else. We decided not to police it. No control, no policy. You can't.'

However, their linguistic practices vary quite significantly both between the three of them and in their individual everyday life in different contexts. Table 3 is a summary of their linguistics practices. It is of course a generalisation. But it is based on our observation over time, which included diary records of specific days, and they confirmed that it is a good characterisation of what they do.

Table 3. Linguistic practices of the Hu family

	At home with family	At work/university	With friends
Mr Hu	Mainly Chinese with wife 70% mix of Chinese and English with son	50% mix of English and Chinese with Chinese colleagues; English only with others	Mainly Chinese. Occasional mix with Chinese friends. English only with others
Mrs Hu	Mainly Chinese with husband 50% mix of Chinese and English with son	English	Mix all the time unless with non-Chinese
Son	Chinese and English mix all the time	English, unless with Chinese friends (occasional mix)	English, unless with Chinese friends (occasional mix)

Within the family, both Mr and Mrs Hu seem to spend equal amount of time on household matters and in interacting with their son. They also seem to interact with their neighbours fairly equally. As said previously, they both work full-time and only have the weekends to socialise. Their socialization typically includes going to the local gym, spending long hours shopping and having lunch in a restaurant, and having friends over to their house or visiting friends. Mrs Hu spends a significant amount of time on social media with her Chinese friends and also relatives in China. Most of her relatives are in China. Mr Hu's relatives are both in China and other parts of the world. He spends less time on social media with them, but does connect with his Chinese colleagues and friends in the UK more often via social media. We will look at their social media practices later. The son mainly socialises with his school and university friends and at weekends spends time at home. He uses both Chinese and English social media, but more on standard English media such as Instagram and WhatsApp. Perhaps the most important, but totally unsurprising, finding here is the fact that all of them mix their languages in almost all situations except for Mrs Hu when she is at work due to lack of Chinese-English bilinguals to interact with.

We carried out a social network profiling of each of the three individuals of the Hu family. Table 4 is the summary of the quantification of the Exchange and Interactional networks of Mr Hu's and Mrs Hu's. The son's networks are profiled separately later. Just to remind us that exchange networks are close contacts that are likely to be the first port of call in need for help psychologically or materially, and interactional networks are people one interacts with regularly but are not regarded as close friends.

Table 4. Social Networks of Mr Hu and Mrs Hu (Figures do not include family members.)

	Exchange (Total 20)		Interactional (%)	
	Chinese	Non-Chinese	Chinese	Non-Chinese
Mr Hu	17	3	57%	43%
Mrs Hu	16	4	35%	65%

As we can see, Mr Hu's and Mrs Hu's exchange networks are rather similar, comprising of predominantly Chinese-based ties. Their interactional networks seem rather different: Mr Hu's seem fairly balanced, whereas Mrs Hu's are mainly non-Chinese, reflecting the differences in their work contacts. What this approach to social network profiling cannot show is the different social networks Mr and Mrs Hu each has for different purposes and in different contexts. We as actors in society do not have one single social network, but multiple and varied networks, at home, in the community, at work and in society at large. These different networks can exert different normative pressures on our behaviour at different times, leading to variable social practices by the same person in different situations. To capture such variabilities, we need to profile individuals' social networks in a different way. Figures 1 and 2 below represent an attempt at profiling the Chinese contents of the Mr Hu's and Mrs Hu's social networks.

Figure 1. Mr Hu's social work pattern

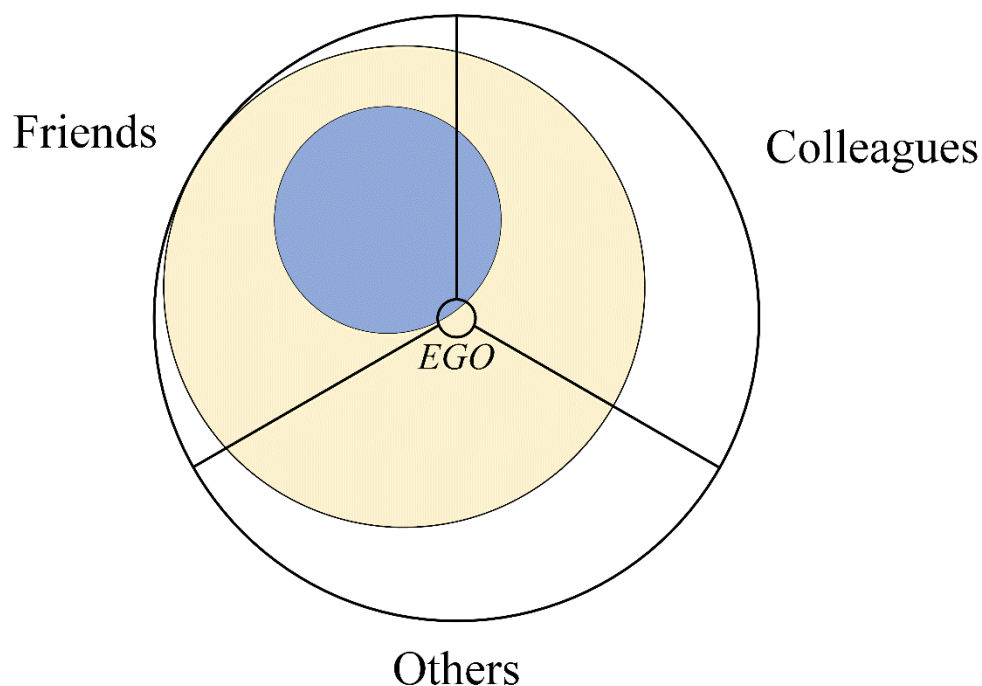
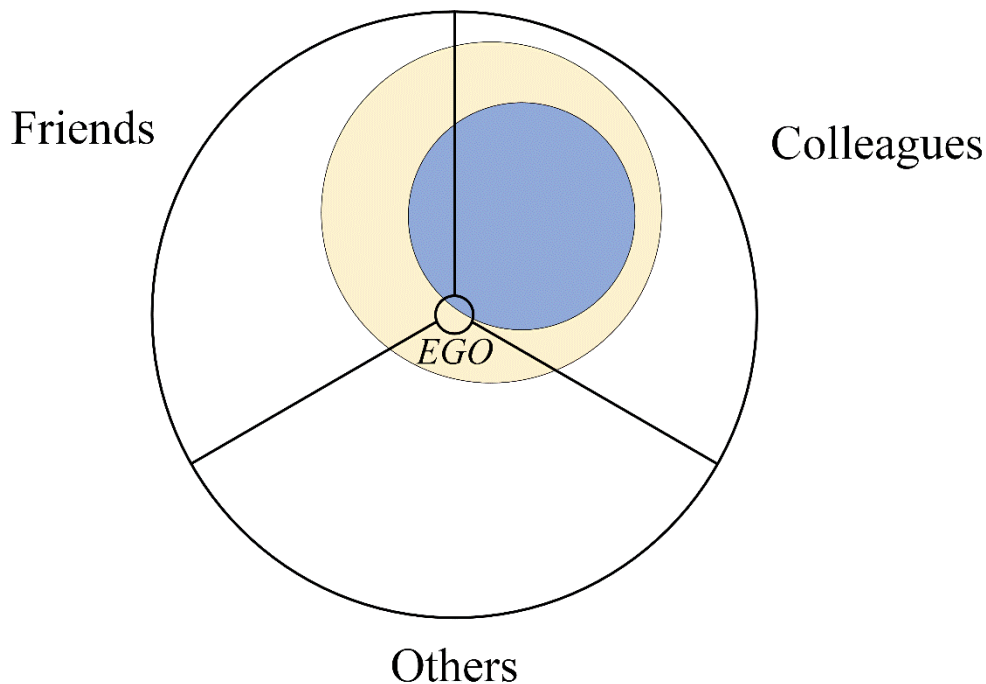


Figure 2. Mrs Hu's social work pattern



Looking at both figures together, we see that Mrs Hu has a much larger social network - we counted some 37 persons with whom she interacted more than once in a week but were not included in her 'close friends' list - than Mr Hu and it comprises of work-based and friendship contacts more or less equally, though as we discussed previously that her work-based ties are mainly non-Chinese. Mr Hu, whilst maintaining a broad balance on Chinese and non-Chinese ties, has a smaller network overall - we observed 14 - and it is concentrated in work-based contacts who are largely Chinese.

We have not included the son in the profiling so far. And this is because he had difficulty naming 20 individuals as significant contacts, i.e. exchange networks. His interactional network is very large, with over 50 individuals, 10% of whom are Chinese and 90% non-Chinese. But his exchange network is small and he could only name nine individuals as his exchange networks, two of whom are Chinese and seven non-Chinese. Significantly, the interactional network contacts are maintained mainly through social media.

Let us now turn to the role of social networking via digital media and how it affects the Hu family's social network patterns and their multilingual practices.

The role of social networking

As has been hinted above, social media feature prominently in the Hu household. They have multiple devices and use multiple platforms to communicate with their different social network contacts. Mrs Hu and the son in particular spend a very significant amount of time on social media. Of her own admission, Mrs Hu uses WeChat, a Chinese social networking app, everyday sometimes, several hours a day. She also uses WhatsApp and Twitter, as well as the more traditional text message. The WeChat exchanges are all with her Chinese contacts, including family and relatives in China and her Chinese friends in the UK. Her messages are usually a mixture of Chinese, English, emoji, pictures and voice messages. She

uses the other media with her non-Chinese contacts. The son also uses WeChat, but mainly with relatives and contacts in China. He puts in pinyin and selects the Chinese characters. Sometimes he chooses the wrong characters. But it does not seem to bother him or his contacts. In fact, both his parents and himself claim that WeChat has helped him to learn to recognise more Chinese words and maintain a good level of Chinese proficiency. When he uses other media to communicate with his friends, it is largely in English with various non-language signs. Images seem to be very prominent in his social networking. Mr Hu, in comparison, uses less social media. He does use WhatsApp and WeChat and mixes Chinese and English when he sends messages. He uses significantly less image or sound in his social networking.

One issue that the family brought up in our conversations with them is how they feel that the social media impacts on their family connections and language practices. Both Mr and Mrs Hu have their parents in China. They are retired but are quite active. They seem to be in good health and living in very comfortable conditions. Mr and Mrs Hu say that they are not at all concerned about their parents' well being in China. They talk to them via WeChat practically every weekend. Here is what Mr Hu said to us:

现在联系太容易，随时都可以发微信WeChat。Skype也行。想什么时候联系就什么时候联系。她表妹生小孩在产房就和我们视频，都能看到。真是世界越来越小，没什么距离感。

'It is so easy to keep contacts these days. You can send WeChat any any time. Also Skype. Whenever you want to be in touch, you can. Her (the wife) sister-in-law had a baby and we had a video call from the birthing ward. We all saw. The world is really getting smaller. There is no sense of distance.'

Mrs Hu adds:

我们有个老同学群，天天都有联系，好像关系越来越近，不是越来越远。我们都不在一个地方，但真的没感觉。我觉得微信什么的发展真是很好。和老人保持联系，和朋友交谈，小孩可以学中文，讲中文，好有好多信息，什么找修理工啦，买东西啦，有什么问题要解决啦，都可以随时问，立刻解决。

'We have a WeChat group for our old university friends. We are in touch every day. Our relationship seems getting closer, not further apart. We don't live in the same place, but we don't feel it. I think it is great that WeChat etc are developing so well. We can keep contacts with our parents; talk to our friends; children can learn Chinese, and speak Chinese; and get lots of information, like getting workmen for repairs, buying things. Whatever problem we need to deal with, we can ask for help at any time and the problems can be solved immediately.'

The idea that social networking via digital media could help to maintain Chinese amongst the younger generations and to keep close contacts with family and friends is very relevant and significant in the study of language maintenance and language shift and certainly deserves further attention in future research.

Summary and Conclusion: Towards a new dynamics of a multilingual community

This paper uses data from a family ethnography of the changes of multilingual practices in the Chinese community in the UK to revisit Social Network Analysis. The British Chinese community has gone through complex social changes since the 1980s when I did my initial sociolinguistic research in the North East of England. The linguistic repertoire has become more diverse and the hierarchy amongst the languages and language varieties has changed, with Mandarin becoming one of the community lingua franca together with Cantonese and English. As the British-born generations of Chinese have become parents and in a few cases even grandparents, English is no longer regarded as a foreign or even second language, but an equal first or in many cases the dominant language. Dynamic multilingual practices where English and Chinese (different varieties) are mixed together are much more commonplace.

Within this context, a somewhat different approach to Social Network Analysis is needed that focuses more on the different network profiles and contacts and variable behaviours in different contexts, rather than the fairly simply connection of strong ethnic networks leading to the maintenance of Chinese and extensive non-ethnic networks leading to shift to English. Indeed, we have seen in the Hu family case, different members of the same family contract social networks that are quantitatively and qualitatively different. Language practices vary according to the social network that they are interacting with at different times.

Social media is playing a significant role in the Chinese community in the UK, both in terms of maintaining social contacts and with regard to their linguistic practices. Again, network-specific linguistic practices are evident. There is also a belief that social networking could contribute to the maintenance of the Chinese language amongst the younger generations of British Chinese. Applications of Social Network Analysis that focus on the effect of social networking and the use of digital media on communicative practices are on the increase in the sociolinguistic literature (e.g. Laitinen, et al., 2017). It is a topic that is worth further investigation.

Returning to the key argument of Social Network Analysis that the structure and content of social networks act as an enforcement mechanism of behavioural norms on members of the network, I want to make one final point. The application of Social Network Analysis in the study of language maintenance and language shift definitely helps to understand the change processes. But we must not pass any value judgement on either maintenance of the community language or shift to another language as being good or bad. Societies change and people change with them. What we have seen in this paper is that different individuals in the same community, indeed the same family, develop different social networks for different purposes, and they exhibit variable, multilingual behaviours. They themselves have said to us that being multilingual is an important part of being British Chinese, not simply maintaining Chinese or learning English. Speaking both Chinese (and different varieties) and English, and mixing them together, has become the norm of the British Chinese community today. New dynamics of multilingualism and new family relations are being developed and will inevitably change further with time.

References

- Cheshire, Jenny, Paul Kerswill, Sue Fox & Eivind Torgersen. 2011. Contact, the feature pool and the speech community: The emergence of Multicultural London English. *Journal of Sociolinguistics* 15(2). 151–196.
- Eckert, Penelope. 2000. *Language variation as social practice: The linguistic construction of identity in Belten High*. Oxford: Wiley-Blackwell.
- Fagyal, Zsuzsanna, Aamarth Swarup, Anna María Escobar, Les Gasser & Kiran Lakkaraju. 2010. Centers and peripheries: Network roles in language change. *Lingua* 120. 2061–2079.
- Gal, Susan. 1979. *Language shift: Social determinants of linguistic change in bilingual Austria*. San Francisco: Academic Press.
- Hulsen, Madeleine, Kees de Bot & Bert Weltens. 2002. Between two worlds: Social networks, language shift, and language processing in three generations of Dutch migrants in New Zealand. *International Journal of the Sociology of Language* 153. 27–52.
- Labov, William. 1972. *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.
- Laitinen, Mikko, Lundberg, Jonas, Levin, Magnus and Lakaw, Alexander (2017) Revisiting weak ties: Using present-day social media data in variationist studies. In *Exploring Future Paths for Historical Sociolinguistics*. Edited by Tanja Säily, Arja Nurmi, Minna Palander-Collin and Anita Auer Amsterdam: Benjamins, Pp. 304-325
- Lanza, Elizabeth & Bente Ailin Svendsen. 2007. Tell me who your friends are and I might be able to tell you what language(s) you speak: Social network analysis, multilingualism, and identity. *International Journal of Bilingualism* 11(3). 275–300.
- Lev-Ari, Shiri. 2016. How the size of our social network influences our semantic skills. *Cognitive Science* 40(8). 2050–2064.
- Li Wei (1992) A two-step sociolinguistic analysis of code-switching and language choice: The example of a bilingual Chinese community in Britain. *International Journal of Applied Linguistics* 2.1: 63-86 (with L. Milroy, S. C. Pong)
- Li Wei (1994) *Three Generations, Two Languages, One Family*. Multilingual Matters
- Li Wei (1995) Variations in patterns of language choice and code-switching by three groups of Chinese/English speakers in Newcastle upon Tyne. *Multilingua* 14.3 pp. 299-325
- Li Wei (1997) Who maintains/relinquishes which language how and why? A response to Michael Clyne. *Current Issues in Language & Society* 4.2: 148-52 (single author)
- Li Wei (2000) Social network analysis and language maintenance and language shift. *Sociolinguistica* 14: 142-147
- Matsumoto, Kazuko. 2010. The role of social networks in the post-colonial multilingual island of Palau: Mechanisms of language maintenance and shift. *Multilingua* 29(2). 133–165.
- Milardo, Robert M. (ed.). 1988. *Families and Social Networks*. Newbury Park, CA: SAGE.
- Milroy, Lesley & Matthew Gordon. 2003. *Sociolinguistics: Method and interpretation*. Oxford: Wiley Blackwell.
- Milroy, Lesley and Li, Wei (1995) A social network perspective on code-switching and language choice: The example of the Tyneside Chinese community. In *One Speaker, Two Languages: Cross disciplinary perspectives on code-switching* (eds) L. Milroy and P. Muysken Cambridge: CUP pp. 136-57
- Milroy, Lesley. 1987. *Language and social networks*, 2nd edn. Oxford: Blackwell.

- Milroy, Lesley. 2002. Introduction: Mobility, contact and language change—Working with contemporary speech communities. *Journal of Sociolinguistics* 6(1). 3–15.
- Raschka, C. Li, Wei and Lee, S. (2002) Bilingual development and social networks of British-born Chinese children. *IJSL*.
- Ryan, Louise & Alessio D'Angelo. 2018. Changing times: Migrants' social network analysis and the challenges of longitudinal research. *Social Networks* 53. 148–158.
- Sallabank, Julia. 2010. The role of social networks in endangered language maintenance and revitalization: The case of Guernesiais in the Channel Islands. *Anthropological Linguistics* 52(2). 184–205.
- Scott, John. 2012. *Social network analysis*, 3rd edn. London: SAGE.
- Sharma, Devyani (2017). Scalar effects of social networks on language variation. *Language Variation and Change*, 29(3), 393-418.
- Stoessel, Saskia. 2002. Investigating the role of social networks in language maintenance and shift. *International Journal of the Sociology of Language* 153. 93–132.
- Tribur, Zoe. 2017. Social network structure and language change in Amdo Tibetan. *International Journal of the Sociology of Language* 245. 169–206.
- Wissink, Marieke & Valentina Mazzucato. 2018. In transit: Changing social networks of sub-Saharan African migrants in Turkey and Greece. *Social Networks* 53. 30–41.