Migration of Skilled Labor Driven by Cultural Assimilation: Evidence from Advanced Degree Holders from China*

(Preliminary Version; Still in Progress)

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Abstract

Using English-name usage as the measure, this paper examines how cultural assimilation plays the role in choosing destination cities among Chinese highly educated immigrants in the U.S. I use data from two online social networking sites (Renren and LinkedIn) and the sample consists of immigrants receiving undergraduate education in Mainland China and graduate education in the U.S. In this paper, I rely on a natural experiment — the difficulty of pronouncing the Chinese name by native English speakers exogenously affects English-name usage — to solve the problem that English-name usage is possibly endogenous. Results show that an individual with English-name usage is more likely to stay in the U.S., and further choose the destination city for employment with a higher population density and a lower level of connection with China (measured by, e.g., the number of direct flights to China). However, English-name usage appears to be unrelated to the city-level racial makeup and educational attainment characteristics.

Keywords: migration, skill, labor, assimilation, name, city

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1 Introduction

It has long been observed that local-name usage, as a form of cultural assimilation[1], helps immigrants in the labor market of the host society (e.g., Arai and Thoursie, 2009). One of the possible mechanisms behind this name effect, for example, is that local-name usage is an effective way to avoid labor market discrimination (Bertrand and Mullainathan, 2004; Oreopoulos, 2011; Rubinstein and Brenner, 2014). The effect of local-name usage, however, might be heterogeneous across immigrants due to huge disparities in individual characteristics (e.g., Cortes, 2004). In particular, foreign advanced degree holders might get little benefit from local-name usage because most of them self select into occupations without discrimination.

That said, as an indicator of cultural assimilation, local-name usage might still be associated with some types of career outcomes. One type of such an outcome is the choice of the destination city for employment. More specifically, we may argue that individual local-name usage is related to some city characteristics[2]. In this paper, I use online social networking data from Renren[3] and LinkedIn to examine an empirical question: all else being equal, for a highly educated immigrant, is English-name usage causally related to characteristics of the destination city?

The relationship between cultural assimilation and immigrants' social outcomes is not a new topic, yet it is a fairly novel way to focus on the effect of names. Most prior economic and sociological research measures cultural assimilation by language attainment (e.g., Bleakley and Chin, 2004, 2008, 2010; Waters and Jiménez, 2005) or educational attainment (Gang and Zimmerman, 2000; Riphahn, 2003; Chiswick and DebBurman, 2004).

[1] Sociologists label cultural assimilation as the first stage of immigrants' assimilation (Gordon, 1964), and local-name adoption and usage are widely used to quantify and measure cultural assimilation (e.g., Shifman and Katz, 2005; Abramitzky et al., 2014).

[2] Imagine a hypothetical example of an Asian advanced degree holder with a *limited* level of assimilation: if he has two job offers, one in Chicago and one in Los Angeles, then all else being equal, he might prefer the job in Los Angeles because the percentage of Asian population is higher in Los Angeles.

[3] Founded in 2005, Renren is a Facebook-type provider of online social networking services based in China. Renren serves as a good substitute of Facebook, which is blocked in China.

While these are certainly not wrong directions to study cultural assimilation, we are unlikely to draw any conclusions on the effect of cultural assimilation on advanced degree holders from these two perspectives, because language and educational attainment among these immigrants are highly homogeneous. On the other hand, there does exist some variation in English-name usage among highly educated immigrants, and such variation might further lead to disparities in career outcomes.

Understanding the role of English-name usage (or more broadly cultural assimilation) in choosing destination cities also has important policy implications. From the perspective of urban labor economics, cultural diversity is positively related to wages and other employment outcomes of native workers, as well as productivity (Ottaviano and Peri, 2005, 2006; Peri, 2012; Bakens et al. 2013)[4], and thus how cities attract highly educated immigrants is a key issue for making urban labor market policies. From the perspective of high-skilled immigration, foreign advanced degree holders promote research and development in the U.S. both in history (e.g., Moser et al., 2014) and in recent years (e.g., Borjas and Doran, 2012). Thus it would be helpful to understand these highly educated immigrants' social lives for public policy makers.

However, it is methodologically difficult to estimate the effect of English-name usage on career outcomes, similar to any research on the causal effect of cultural behaviors (Bowles, 1998; Polavieja, 2015). First, English-name usage can be correlated with unobservable variables that also affect career outcomes, such as attitudes. Second, identifying English names on social networking sites faces measurement error: a user is allowed to add any English word in his profile, and non-name English words might be incorrectly identified as names (of course, the reversal cases are also possible). The last issue is reversal causality. For example, an immigrant working in a city with a low level of cultural/ethnic diversity (e.g., the percentage of majority population is high) might feel more comfortable to use an English name along with his original name.

[4] More broadly, researchers find regional-level ethnic diversity is positively correlated with economic outcomes. For example, cultural diversity improves plant-level productivity (Trax et al., 2015)

This paper relies on a natural experiment to examine the causal role of English-name usage in choosing destination cities: all else being equal, an individual is more likely to use an English name (and further show this name online) if his Chinese name is difficult to be pronounced by native speakers of English. The "pronunciation difficulty" can be identified based on linguistic research on the difference between the phonological system of Chinese and English. This natural experiment design leads to the instrumental variable (IV) strategy that tackles the endogeneity problem of English-name usage. On one hand, using the English name along with the original Chinese name is a good way to avoid discomfort for migrants with "difficult-to-pronounce" names. On the other hand, naming decisions among these migrants in the sample were made more than two decades ago, when China was still a relatively insular country and parents were unlikely to consider the pronunciation difficulty of foreigners. Intuitively, these make the pronunciation difficulty indicator as an arguably valid IV for English-name usage, and in the latter section I will discuss the validity of this IV in detail.

Employing this strategy, I find that English-name usage affects some but not all location-related career outcomes: controlling for demographic and educational characteristics, a Chinese advanced degree holder in the U.S. with English-name usage shown online is more likely to stay in the U.S. to work. Conditional on staying in the U.S. for employment, an individual with English-name usage is more likely to choose the destination city where the population density is higher and the level of connection with China (measured by, e.g., the number of direct flights to China per day) is lower. However, English-name usage appears to be unrelated to the local racial makeup (and in particular, the percentage of Asian and Chinese population) and the rate of college or graduate school attainment.

The rest of the paper is organized as follows. Section 2 introduces the background of the paper. Section 3 introduces data and methods used in this paper. Section 4 reports the findings. Section 5 concludes the paper.

2 Background

In this section, I will discuss the background the paper. I first briefly review prior research on the role of local-name usage in determining immigrants' social and economic outcomes. I then focus specifically on Chinese highly educated immigrants and discuss the possible determinants of English-name usage.

2.1 Local-Name Usage and Social and Economic Outcomes

Why do immigrants adopt and use local names? Communication scholars and social linguisticians tend to believe that local-name usage is closely related to identity transitions among minorities and immigrants (e.g., Larkey et al., 1993). Indeed, local-name usage is considered to be a reliable predictor of identity assimilation, especially among Asian immigrants (Nicoll et al., 1986). Moreover, the choices of converting (or maintaining) identities by name usage are intergenerational: first-generation parents transmit attitudes toward (or behaviors related to) ethnic and cultural identity to their children through naming decisions (e.g., Gerhards and Hans, 2009; Abramitzky et al., 2014).

Name usage does not only lead to cultural outcomes, and there is probably a socioeconomic mechanism behind name-usage behaviors. Fryer and Levitt (2004) find that names provide a strong indicator of socioeconomic status among African Americans born in the 1960s and 1970s, and of course, names can also be used to examine intergenerational mobility (Olivetti and Paserman, 2013). In fact, similar to name-usage, one crucial purpose for immigrants to "convert" their ethnic or cultural identities is to achieve better socioeconomic outcomes (e.g., Battu and Zenou, 2010; Bisin et al., 2011), although it is still debatable whether an immigrant will really benefit from changing the identity (Portes and Zhou, 1993; Dustmann, 1996; Casey and Dustmann, 2010), or more specifically, changing the first name (Fryer and Levitt, 2004). One can certainly argue that (a) such a socio-economic motivation behind name-usage behaviors might not be applicable for highly educated migrants, and (b) there are non-socioeconomic reasons behind local-name usage/non-usage (e.g., Zhou, 1997; Battu et al., 2007).

A fundamental question is: if local-name usage does have a significant effect, what are the possible mechanisms? Many economic studies point out that a major role of local-name usage is the "tool" for avoiding discrimination. Labor market discrimination toward ethnic-sounding names has been found in both the non-experimental (e.g., Kaas and Manger, 2012) and experimental setting (e.g., Carlsson and Rooth, 2007; Nordin and Rooth, 2009; Booth, Leigh, and Varganova, 2012) in Europe and the U.S., and unsurprisingly, such discrimination exists in other markets as well, such as the housing market (Ahmed and Hammarstedt, 2008; Baldini and Federeci, 2011; Drydakis, 2011) and the used-car market (Zussman, 2013). The above papers mainly focus on the negative effect of ethnic-sounding family names, but discrimination based on given names also exists (e.g., Bertrand and Mullainathan, 2004; Jacquemet and Yennalis, 2012; Hanson and Santas, 2014). Using majority names, in contrast, helps immigrants achieve better employment outcomes in the labor market (Arai and Thoursie, 2009; Oreopoulos, 2011).

On the other hand, as an indicator of cultural assimilation, local-name usage might also affect immigrants' outcomes through its correlation with other assimilation behaviors. This is especially useful for understanding the effect of English-name usage on highly educated immigrants because given their human capital characteristics as well as self-selection into occupations with the strict equal opportunity policy, it is probably less convincing that they use English names to avoid discrimination. Considering English-name usage as one step of assimilation (which leads to further assimilation outcomes) is new to research on name, but has actually been previously studied by other economic analyses on cultural assimilation. For example, Bleakley and Chin (2010) use census data and show that there is a transitional pattern from English proficiency (an earlier stage of assimilation) to intermarriage and decreasing fertility (later stages of assimilation) among immigrants in the U.S. Guven and Islam (2015) employ their econometric methods and repeat the exercise using Australian data. This pattern might also exist in the context of this paper: choices of destination cities might be made based on assimilation factors, but not labor market characteristics.

2.2 English-Name Usage among Chinese Advanced Degree Holders

I now turn to focus specifically on English-name usage among Chinese advanced degree holders in the U.S. Adopting the English name is common among students receiving post-secondary education in China, as it is a useful tool for language pedagogy (Edwards, 2006; Gao et al., 2005). However, students are surely not required to *use* English names outside of class. In the context of migrants in the U.S., sociologists point out that the propensity of using the English name increases if an immigrant is more exposed to the U.S. culture (Sue and Telles, 2007), and the age at arrival has the significant impact on the exposure to the U.S. culture (Rogler et al., 1980; Feliciano, 2001; Myers et al., 2009; Bleakley and Chin, 2010), and furthermore, usage of the English name.

The age at arrival in my sample is fairly homogeneous: the sample consists of individuals receiving undergraduate education in China and graduate education in the U.S., which means that most of them were around 22 years old upon arrival — a fairly old age for the time of arrival. This actually creates some variation in English-name usage: childhood immigrants are very likely to use English names, while the age at arrival might no longer plays the vital role in determining English-name usage for immigrants who are adults upon arrival. It is, however, still useful to control for the year since arrival.

Besides other demographic variables (such as age[5] and gender), educational characteristics are also likely to be correlated with English-name usage. One can imagine that cultural environments (e.g., if measured by the racial makeup) in U.S. graduate schools influence Chinese students' decisions of English-name usage, but pre-immigration educational characteristics can also affect immigrants' cultural behaviors or socioeconomic out-

[5]Note that age and year since arrival might be highly collinear (because all individuals in the sample arrive in the U.S. right after receiving bachelor's degrees), and thus I only need to include one of these variables.

comes in the host country (e.g., Chiswick and DebBurman, 2004; Xie and Gough, 2011; Polavieja, 2015). In this context, the college quality might have an effect on students' English-name usage. For example, Chinese colleges with higher quality can offer better English courses and more international academic activities (e.g., exchange programs, seminars that invite non-Chinese speakers). It is useful to control for characteristics of both Chinese colleges and U.S. graduate schools that individuals attend.

Finally, there is another variable that determine local-name usage, but has long been neglected by scholars: the linguistic factor. An immigrant is more likely to adopt and use a local-sounding name if his original name causes discomfort and embarrassment. In this context, the *pinyin* system Romanizes Chinese characters using the Latin alphabet, but it cannot always precisely reflect the pronunciation rule of Chinese (e.g., Bassetti, 2007). Hence, non-Chinese speakers might find it difficult to pronounce some Chinese names that contain these characters. I will introduce three major types of difficult-to-pronounce Chinese characters in the first appendix.

The "pronunciation difficulty" of the Chinese name might be an important reason behind English-name usage. On the other hand, this linguistic feature does not reflect individual social or economic characteristics. For individuals in the sample, naming decisions were made more than two decades ago — when China was still a relatively insular country — and parents were unlikely to consider much about the pronunciation difficulty with respect to foreigners. My identification strategy is based on these two properties. I will discuss this strategy in the next section.

3 Data and Methods

3.1 Data

In this section, I first introduce data used for the statistical analysis in this paper. The data set is a representative sample set of students receiving undergraduate education in

China and graduate education in the U.S. This sample is retrieved from Renren.com, a Facebook-type online social networking site based in China. I do not use Facebook due to data availability and, more importantly, the restriction of using Facebook in China. In other words, Renren serves as Facebook's substitute for students in China and is thus more widely used among Chinese students.

Researchers (and even casual observers) using Renren data are able to acquire individual demographic (e.g., age and gender) and educational (e.g., colleges and graduate schools attended, undergraduate and graduate majors) characteristics. Most Renren users, however, do not provide their job information. To study individuals' labor market activities, I further link Renren accounts with the LinkedIn accounts to construct a data set containing demographic, educational, and labor market variables.

Of course, this means that my empirical findings must be interpreted with caution because the sample only consists of individuals who self-select to use both websites. More importantly, while this sample is a representative sample of the Renren database, I am not able to guarantee that the result can be generalized to the entire population of Chinese advanced degree holders in the U.S. I, however, compare age, gender, and school major characteristics between this sample and ACS. I will present the comparison in the second appendix of this paper.

Renren and LinkedIn only allow "real" users to register accounts[6]. However, there is still some flexibility in presenting personal information on both social networking websites. In particular, users from non-English-speaking countries, such as China, are allowed to show their English names online[7]. Based on this, I can create a dummy variable indicating online English-name usage.

Table 1 presents the summary statistics of independent variables and the instrumental variable. I only present eight most representative variables among all regressors, including

[6] In particular, recent Renren users even must provide phone numbers and/or national identification numbers to create their accounts.

[7] The most common pattern of presenting the name is that the English name, written in the parenthesis, is placed between the first and last name. An example of this pattern is: "Chuang (George) Wang".

demographic and educational background variables. Although not reported here, I will also control for online social networking variables (e.g., the number of friends/connections). Panel A shows that in the sample, 13.3% of all individuals show their English names online. 48.9% of the sample is male, and the average year since arrival in the U.S. is 4.684.

Table 1: Summary Statistics: Regressors and IV

	Mean	Std. dev.
A. Selected Regressors‡:		
English-name usage	0.133	(0.340)
Male	0.489	(0.500)
Year since arrival	4.684	(1.826)
Tier 1 Chinese college dummy	0.205	(0.403)
Tier 2 Chinese college dummy	0.270	(0.444)
Tier 1 US school dummy	0.140	(0.347)
Tier 2 US school dummy	0.497	(0.500)
International students %	0.131	(0.067)
B. Instrumental Variable:		
Pronunciation difficulty	0.422	(0.494)

‡: only most representative regressors are shown. $N = 7,287$.

The rest of the Panel A focuses on colleges and graduate schools. While a direct way to control for school characteristics is to use school fixed effects, and some regression models in the latter empirical analysis do use school fixed effects, an alternative approach to control for schools from the perspective of school quality is to split schools into different tiers by rankings. Based on this idea, I construct three tiers for both Chinese colleges and U.S. graduate schools based on school rankings. In the third appendix I will introduce criteria of constructing school tiers, and here I only present the distribution of tiers among schools. 20.5% of individuals receive bachelor's degrees from nine top-tier Chinese colleges, and 27% of individuals graduated from tier 2 colleges. After arrival, 14% of Chinese students in the sample attend top-tier U.S. graduate schools, and almost half of all students enter tier 2 schools. Among U.S. graduate schools attended by individuals in the sample, the average percentage of international students is 13.1%, and I can also control for the demographics at the school level (e.g., population, racial composition). Finally, I should note that there is another set of education covariates: school majors. The summary statistics are not shown here, but I will include school major fixed effects in regression models.

In Table 2 I turn to discuss eighteen dependent variables, categorized into five groups. In Panel A I first describe individual choices of countries for employment. 66.4% of all individuals stay in the U.S. to work, and slightly more people have their first jobs in the U.S. (and some of them leave the U.S. afterwards). 4.3% of the sample has the first job in neither the U.S. nor Mainland China. While not reported here, major destination countries/regions include Hong Kong and Canada.

In Panel B and C I report city-level demographic characteristics. Following standard approaches I use log population and density in the analysis; the average log city population is 12.137, and the average log population density is 8.466. 73.2% of all individuals in the sample work in ten most populous *combined* statistical areas (composed of adjacent Metropolitan and Micropolitan Statistical Areas) in the U.S. As for the racial makeup, I will investigate the relationship between English-name usage and city-level percentages of populations of several major races. The average share of the Asian population is 9.1%, and the share of the Chinese population is 4.4% — both are higher than that in the whole U.S. In contrast, the average share of the White population, 53.8%, is substantially lower than that in the whole U.S. Obviously, the geographic distribution of advanced degree holders from China differs from the geographic distribution of the general U.S. population.

In Panel D I present educational attainment characteristics of cities. On average, there are 86.2% of the population holding high school degrees or higher, 35.6% holding bachelor's degrees or higher, and only 14.4% holding at least graduate or professional degrees. Finally I examine how the city is connected to China, measured by four variables. The average number of direct flights to China per day — including flights to Beijing, Shanghai, Guangzhou, Wuhan, and Chengdu, but not including Hong Kong and Taipei — is 0.135, and 6.6% of all individuals in the sample work in cities with an embassy or consulate general of China. 38.7% of all individuals work in places having one or more Chinatowns, and finally, the average time zone difference from China is 13.887 hours (daylight saving time).

Table 2: Summary Statistics: Dependent Variables

	Mean	Std. dev.
A. Country for Employment:		
Staying in the U.S.	0.664	(0.488)
First job in the U.S.	0.702	(0.465)
First job *not* in the U.S. and China	0.043	(0.106)
B. Population and Density:		
(Log) city population	12.137	(1.330)
(Log) population density	8.466	(0.724)
In top 10 stat. areas by population	0.732	(0.208)
C. Racial Composition:		
Asian population %	0.091	(0.070)
Chinese population %	0.044	(0.056)
White population %	0.538	(0.14)
African American population %	0.128	(0.082)
Hispanic/Latino population %	0.160	(0.086)
D. Educational Attainment:		
Graduate or professional degree %	0.144	(0.119)
Bachelor's or higher %	0.356	(0.194)
High school graduate or higher %	0.862	(0.166)
E. Connection with China:		
Number of direct flights to China	0.135	(0.469)
Consulate/embassy	0.066	(0.344)
Chinatown	0.387	(0.424)
Time zone difference from China	13.887	(1.635)

$N = 7,287$.

3.2 Empirical Strategies

I first start with the traditional Ordinary Least Squares (OLS) estimation. Let C_i be one of the location characteristics presented in Table 2 for individual i, then the OLS specification can be established as follows:

$$C_i = \alpha + \theta E_i + \mathbf{D}_i\beta + \mathbf{S}_i\gamma + \mathbf{M}_i\delta + \varepsilon_i \tag{1}$$

where E_i indicates English-name usage, and θ is the "effect" of using the English name for i. $\mathbf{D}_i$ is the vector of individual demographic characteristics, $\mathbf{S}_i$ is the vector of school characteristics, such as school tier fixed effects, the demographics at the school level, or simply college and graduate school fixed effects. $\mathbf{M}_i$ is the vector of school majors fixed effects, and ε_i is the error term. Non-linear models for regressions where C_i is dichotomous or ordinal can be similarly established.

E_i is possibly endogenous because (a) ε_i might be correlated with both E_i and C_i; (b) C_i might reversely affect E_i; and (c) the identification of E_i might be inaccurate. In theory, the issue of endogeneity can be solved if E_i is randomly "assigned" to individuals in the sample, which is obviously inapplicable in this case. Instead, in this paper I exploit a natural experiment on English-name usage: denote $PD_i = 1$ if i's original Chinese name contains characters that are considered to be difficult to pronounce (and $PD_i = 0$ if otherwise), and PD_i serves as the IV for E_i. This leads to the first-stage regression as follows:

$$E_i = \alpha_1 + \tau PD_i + \mathbf{D}_i\beta_1 + \mathbf{S}_i\gamma_1 + \mathbf{M}_i\delta_1 + \epsilon_i \tag{2}$$

I now discuss the validity of the IV from two perspectives. First, why the difficulty of pronouncing the Chinese name might be a robust predictor of E_i? An intuitive answer is that an individual with a difficult-to-pronounce Chinese name will experience discomfort and embarrassment caused by mispronunciations by native speakers of English. A simple strategy to tackle this problem is to use an English name. In Table 3, I regress English-name usage indicator on the dummy variable indicating the pronunciation difficulty.

Table 3: First-Stage Regressions

	English-name usage			
	(1)	(2)	(3)	(4)
Pronunciation difficulty	0.125***	0.122***	0.123***	0.120***
	(0.008)	(0.008)	(0.008)	(0.008)
School tier FE	No	No	Yes	No
School FE	No	No	No	Yes
Full set of controls	No	Yes	Yes	Yes
R^2	0.033	0.064	0.069	0.167
Observations	7,287	7,287	7,287	7,287

Standard errors are in parentheses. *: $p < .1$; **: $p < .05$; ***: $p < .01$.

Table 3 presents the first-stage relationship, in which whether the Chinese name is difficult to pronounce predicts English-name usage. In all regressions I find strong correlation between the pronunciation difficulty and individual's choice of using the English name online. Of course some migrants with difficult-to-pronounce names do not use English names, possibly because (a) they still prefer to use their original names only, or (b) they do not think mispronunciation is an issue. As a result, what the IV model estimates is the local average treatment effect (Imbens and Angrist, 1994; Imbens, 2010).

I now move to another requirement for a valid IV. I have argued earlier that the only way that the pronunciation difficulty is related to city characteristics should be through its effect on English-name usage. This is because that naming decisions were made more than two decades ago, when China was still an insular country and parents were unlikely to consider whether their child's name might be difficult to be pronounced by foreigners or not. In other words, children with difficult-to-pronounce names should not have any other special individual characteristics. To see this argument clearly, in Table 4 I present the difference in individual characteristics between migrants who have and do not have difficult-to-pronounce Chinese names.

Table 4: Checking on Systematic Differences: The Full Sample

	w/o difficult-to-pronounce names	w/ difficult-to-pronounce names	p-value
Male	$0.486(0.500)$	$0.493(0.500)$	n.s.
Year since arrival	$4.732(1.822)$	$4.619(1.828)$	$**$
Category 1 Chinese college dummy	$0.203(0.402)$	$0.207(0.405)$	n.s.
Category 2 Chinese college dummy	$0.271(0.445)$	$0.269(0.443)$	n.s.
Category 1 US school dummy	$0.138(0.344)$	$0.144(0.351)$	n.s.
Category 2 US school dummy	$0.498(0.500)$	$0.495(0.500)$	n.s.
International students %	$0.129(0.066)$	$0.131(0.069)$	n.s.
Observations	$4,210$	$3,077$	

Unpaired t tests are employed.
No significant difference in social networking and school-level demographic variables.
Standard deviations are in parentheses. n.s.: $p \geq .05$; *: $p < .1$; **: $p < .05$; ***: $p < .01$.

In Table 4 I only present the comparison of eight representative individual demographic and school variables. I find almost no significant difference in most of these covariates; the only exception is year since arrival: individuals with difficult-to-pronounce Chinese names appear to arrive in the U.S. slightly earlier, but still, the difference is subtle. Students with difficult-to-pronounce names are neither more or less likely to attend better colleges and graduate schools, and the percentage of international students is not related to the pronunciation difficulty indicator. While not reported here, I also find no systematic difference in online social networking variables (e.g., the number of friends) and other school-level demographic characteristics (e.g., the racial makeup in the local area). Table 4 implies that difficult-to-pronounce Chinese names are almost randomly "assigned" in the sample, and the pronunciation difficulty should influence the choice of the destination city for employment only through its impact on English-name usage.

4 Results

In this section I report the findings of this paper. I first present main results, and then conduct several additional tests to check the robustness of the results.

4.1 Main Results

I start this section by Table 5, in which I investigate the relationship between English-name usage and the destination region for employment at the country level. In the first row, I examine whether English-name usage is correlated with the likelihood of staying in the U.S. to work. While the OLS model shows no significant effect of English-name usage on the choice of the country for employment, the OLS estimate might be downward biased; on the other hand, the IV model implies that all else being equal, an individual with English-name usage are more likely to stay in the U.S. to work. The similar pattern is observed in the second row: IV models again indicate that an individual with English-name usage is more likely to have his first job in the U.S. In the last row of this table I focus on Chinese students whose first jobs are neither in the U.S. nor in Mainland China (e.g., in Canada or Hong Kong). However, English-name usage appears to be uncorrelated with the choice of working in non-US/China regions.

Table 5: Country for Employment

	Coefficient of English-name usage			
	OLS	Two-stage-least-squares		
1. Staying in the U.S.	0.043	0.196*	0.202*	0.208**
	(0.035)	(0.101)	(0.104)	(0.102)
2. First job in the U.S.	0.046	0.193*	0.197*	0.201*
	(0.036)	(0.100)	(0.102)	(0.103)
3. First job *not* in US/China	−0.047	0.022	0.034	0.037
	(0.062)	(0.028)	(0.029)	(0.027)
School tier FE	Yes	No	Yes	No
School FE	No	No	No	Yes
Full set of controls	Yes	No	Yes	Yes
Observations	5,998	5,998	5,998	5,998

Standard errors are in parentheses. *: $p < .1$; **: $p < .05$; ***: $p < .01$.

Starting from Table 6, I turn to analyze the correlation between English-name usage and characteristics of destination U.S. cities for employment. Table 6 focuses on three types of cities' population and density characteristics. Again, OLS estimates appear to be downward biased, and IV models show that conditional on staying in the U.S., Chinese advanced degree holders with English-name usage are more likely to work in cities with higher population densities. Moreover, individuals with English-name usage have higher chances of working in top 10 most populous combined statistical areas in the U.S. That said, both the OLS and IV models find no significant relationship between English-name usage and the city population.

In Table 7 I examine whether migrants with English-name usage are more likely to work in cities with specific ethnic concentrations. Intuitively, less assimilated migrants might be more likely to stay in ethnic enclaves, hence English-name usage is likely to be correlated with the city-level racial makeup, although prior empirical findings show that this hypothesis is only true for some, but not all, immigrants (Bleakley and Chin, 2010). In Table 7, indeed, I find no clear relationship between English-name usage and the racial makeup: Chinese advanced degree holders with English-name usage are actually not less likely to work in cities with higher percentages of the Asian or Chinese population. I further examine the percentage of the White population — the Asian (as well as Chinese) popula-

Table 6: Population and Density

	Coefficient of English-name usage			
	OLS	Two-stage-least-squares		
1. Log city population	0.093	0.156	0.153	0.165
	(0.085)	(0.204)	(0.202)	(0.211)
2. Log population density	0.079***	0.322***	0.334***	0.353***
	(0.025)	(0.140)	(0.143)	(0.147)
3. In top 10 areas by population	0.098	0.162**	0.163**	0.171*
	(0.076)	(0.074)	(0.078)	(0.088)
School tier FE	Yes	No	Yes	No
School FE	No	No	No	Yes
Full set of controls	Yes	No	Yes	Yes
Observations	3,983	3,983	3,983	3,983

Standard errors are in parentheses. *: $p < .1$; **: $p < .05$; ***: $p < .01$.

tion has the lowest index of dissimilarity with the White population, compared with other races in the U.S. However, I again find no evidence that English-name usage is correlated with the share of the White population in the city. Similarly, I find no significant relationship between English-name usage and the percentage of either the African American or Hispanic/Latino population.

Table 7: Racial Composition

	Coefficient of English-name usage			
	OLS	Two-stage-least-squares		
1. Asian population %	−0.000	−0.018	−0.023	−0.025
	(0.002)	(0.096)	(0.101)	(0.098)
2. Chinese population %	0.006	−0.044	−0.053	−0.056
	(0.013)	(0.067)	(0.056)	(0.056)
3. White population %	0.008	−0.028	0.031	0.033
	(0.006)	(0.032)	(0.029)	(0.030)
4. African American population %	0.006	0.013	0.019	0.021
	(0.005)	(0.021)	(0.024)	(0.022)
5. Hispanic/Latino population %	0.004	0.011	0.013	0.014
	(0.007)	(0.009)	(0.011)	(0.011)
School tier FE	Yes	No	Yes	No
School FE	No	No	No	Yes
Full set of controls	Yes	No	Yes	Yes
Observations	3,983	3,983	3,983	3,983

Standard errors are in parentheses. *: $p < .1$; **: $p < .05$; ***: $p < .01$.

Does migrants with English-name usage tend to work in “smarter” cities? In Table

8 I turn to analyze whether individual's English-name usage is correlated with city-level educational attainment characteristics. I first regress the city-level percentage of people holding graduate or professional degrees on English-name usage and other covariates, and both OLS and IV models show no significant effect of English-name usage. In additional, English-name usage is uncorrelated with neither the percentage of the population with bachelor's or higher degrees, nor the percentage of the population with high school diplomas or higher degrees.

Table 8: Educational Attainment

	Coefficient of English-name usage			
	OLS	Two-stage-least-squares		
1. Graduate/professional degree %	0.012	0.028	0.035	0.033
	(0.026)	(0.024)	(0.024)	(0.028)
2. Bachelor's or higher %	0.068	0.086	0.088	0.092
	(0.104)	(0.062)	(0.064)	(0.068)
3. High school or higher %	0.044	0.092	0.091	0.086
	(0.033)	(0.066)	(0.068)	(0.065)
School tier FE	Yes	No	Yes	No
School FE	No	No	No	Yes
Full set of controls	Yes	No	Yes	Yes
Observations	3,983	3,983	3,983	3,983

Standard errors are in parentheses. *: $p < .1$; **: $p < .05$; ***: $p < .01$.

The final table for main results focuses on the relationship between English-name usage and city characteristics related to connections with China. Intuitively, an immigrant with a limited level of assimilation might be more willing to work and reside in cities more closely connected with his home country. Are Chinese advanced degree holders with English-name usage thus more comfortable to choose destination cities with lower levels of connection with China? In Table 9 I regress four connection variables on English-name usage and other covariates. In Row 1 all of three IV models show that all else being equal, an individual *without* English-name usage will choose the destination city with more direct flights to China. Similarly, an individual without English-name usage is more likely to work in a city where there is the embassy or consulate general of China. These two characteristics describe the "official" connection with China. However, English-name usage appears to be uncorrelated with whether the city has Chinatowns. Also, English-name usage does not affect the choice of the destination city with respect to the time zone difference from China — which is actually not surprising, as both the East Coast and the West Coast are popular destinations of immigrants, including those from China.

Table 9: Connection with China

	Coefficient of English-name usage			
	OLS	Two-stage-least-squares		
1. Direct flights to China #	-0.022	-0.029*	-0.031**	-0.030**
	(0.016)	(0.015)	(0.015)	(0.015)
2. Consulate/embassy	-0.006	-0.011*	-0.010*	-0.013*
	(0.004)	(0.006)	(0.006)	(0.007)
3. Chinatown	0.063	0.096	0.088	0.086
	(0.043)	(0.077)	(0.074)	(0.073)
4. Time zone difference	-0.302	0.128	0.144	0.138
	(0.609)	(0.438)	(0.427)	(0.421)
School tier FE	Yes	No	Yes	No
School FE	No	No	No	Yes
Full set of controls	Yes	No	Yes	Yes
Observations	$3,983$	$3,983$	$3,983$	$3,983$

Standard errors are in parentheses. *: $p < .1$; **: $p < .05$; ***: $p < .01$.

In general, all else being equal, a Chinese advanced degree holder in the U.S. with English-name usage is more likely to stay in the U.S. to work, and conditional on staying in the U.S., English-name usage is positively correlated with the population density of the city, and negatively correlated with the level of connection with China. OLS models generally yield downward biased results, and among IV models, the difference between using school tier fixed effects plus other school variables and directly using school fixed effects is numerically small. On the other hand, I find no significant relationship between English-name usage and the city-level racial and educational attainment characteristics.

4.2 Robustness Checks

in progress.

5 Conclusion

in progress.

Appendix A: Chinese Characters and the Pronunciation Difficulty

The natural experiment on English-name usage relies on the classification of Chinese names by the pronunciation difficulty. I now discuss the criteria of identification. Identifying the pronunciation difficulty is based on the fact that the *pinyin* system, which Romanizes Chinese characters, cannot precisely reflect pronunciation rules of Chinese due to phonological differences between Chinese and Western languages (Bassetti, 2007).

There are mainly three categories of Chinese names with *pinyin* characters that are pronounced in substantially different ways in Chinese and English, so that mispronunciations by native speakers of English might occur. The first category of difficult-to-pronounce Chinese names involves the ambiguity of the velar nasal versus the alveolar nasal in Chinese (see, e.g., Zee, 1985; Lee and Zee, 2003). This category contains all Chinese names with syllables *-ang* and *-eng*[8].

The second category of difficult-to-pronounce Chinese names is related to syllables that are widely seen in both Chinese and English and do not seem ambiguous, but have different pronunciation rules in two languages. This category contains Chinese names with *-he*, *-hi*, *-si*, *-ue*, and *-yu*. For example, *shi* and *yu* are commonly pronounced as *she* and *you* in English, which are distinct from the pronunciation rules in Chinese.

The last category of difficult-to-pronounce Chinese names is somewhat different from the first two categories: here the difficulty of pronouncing Chinese names in this category is

[8]For example, *tang* is usually pronounced as *tan* by native speakers of English, but the pronunciation of *tang* in Chinese and *tan* in English are different. However, I do not include any case of *-ing* (which is usually pronounced as *-in* by English speakers) because *-ing* and *-in* sound fairly similar in two languages.

due to the uniqueness of Chinese characters. I especially focus on Chinese names with letter *x*-, which causes problems of mispronunciation by native speakers of English. For example, *xu* is usually pronounced as *ksu* or *zu* in English, but both of them sound substantially different from the pronunciation of *xu* in Chinese.

I admit that the way to identify the pronunciation difficulty is fairly simple and coarse. The pronunciation difficulty variable is constructed as a dummy variable, although it is reasonable to believe that even among difficult-to-pronounce names, there might be various degrees of pronunciation difficulties. However, it is difficult to quantitatively build the precise classification of different degrees of the pronunciation difficulty. Moreover, technically, the way to identify difficult-to-pronounce Chinese names in this paper ensures the validity of the empirical strategy if it creates a pronunciation difficulty variable such that this variable is (a) closely correlated with English-name usage and (b) uncorrelated with individual characteristics, and thus affects the outcome — homophily in friendships — only through English-name usage. In other words, if the above two conditions hold, the estimated effect of English-name usage is still unbiased even if this exogenous predictor of English-name usage is constructed in a coarse manner.

Appendix B: Comparison between the Sample and ACS

in progress.

Appendix C: School Tiers

The data set retrieved from Renren and LinkedIn allows me to control for school information. The simplest way is to use college and graduate school fixed effects. School fixed effects also control for geographic information. As introduced earlier, an alternative way is to partition schools into tiers by rankings, which controls for schools in a coarse manner and reduces the number of variables. For Chinese colleges, tier 1 colleges include members of the C9 League[9]; tier 2 colleges include universities sponsored by "Project 985"[10] but are not members of the C9 League; tier 3 colleges include all other schools. For U.S. graduate schools, tier 1 schools include universities that are in top 10 of the US News Best Global University Rankings, plus all other Ivy League schools[11]; tier 2 schools include all other members of the Association of American Universities (AAU); tier 3 schools include all other U.S. universities in the data set. In Section 3, I have already shown that about 20% of all individuals come from tier 1 Chinese colleges (i.e., the C9 League), and 27% are from ctier 2 colleges. 14% of all individuals attend tier 1 U.S. graduate schools and around 50% of all individuals attend tier 2 U.S. schools.

References

[1] Abramitzky, Ran, Leah Platt Boustan, and Katherine Eriksson. 2014. "Cultural Assimilation during the Age of Mass Migration." manuscript.

[2] Ahmed, Ali M., Mats Hammerstedt. 2008. "Discrimination in the Rental Housing Market: A Field Experiment on the Internet." *Journal of Urban Economics*, 64(2), 362 - 372.

[3] Arai, Mahmood, and Peter Skogman Thoursie. 2009. "Renouncing Personal Names: An Empirical Examination of Surname Change and Earnings." *Journal of Labor Economics*, 27(1), 127 - 147.

[4] Bakens, Jessie, Peter Mulder, and Peter Nijkamp. 2013. "Economic Impacts Of Cultural Diversity In The Netherlands: Productivity, Utility, And Sorting." *Journal of Regional Science*, 53(1), 8 - 36.

[5] Baldini, Massimo, and Marta Federici. 2011. "Ethnic Discrimination in the Italian Rental Housing Market." *Journal of Housing Economics*, 20(1), 1 - 14.

[9] Equivalent to the Ivy League in the U.S. and the *Exzellenzinitiative* in Germany, China's C9 League comprises nine most renowned universities in Mainland China, including Peking University, Tsinghua University, Zhejiang University, University of Science and Technology of China, Fudan University, Nanjing University, Shanghai Jiao Tong University, Harbin Institute of Technology, and Xi'an Jiao Tong University.

[10] Project 985 is an official project initiated by national and local governments that allocate funding to 39 reputable research universities in Mainland China after careful evaluations on research and teaching quality.

[11] Tier 1 U.S. graduate schools thus include the following eight universities: Harvard University, Massachusetts Institute of Technology (MIT), University of California-Berkeley (UCB), Stanford University, California Institute of Technology (Caltech), University of California-Los Angeles (UCLA), University of Chicago, Yale University, Columbia University, University of Pennsylvania, Cornell University, Brown University, and Dartmouth College.

[6] Bassetti, Benedetta. 2007. "Effects of Hanyu Pinyin on Pronunciation in Learners of Chinese as a Foreign Language." In *The Cognition, Learning and Teaching of Chinese Characters*, ed. Guder, A. and Jiang, X. and Wan, Y., 201 - 234. Beijing, China: Beijing Language and Culture University Press.

[7] Battu, Harminder, McDonald Mwale, and Yves Zenou. 2007. "Oppositional Identities and the Labor Market." *Journal of Population Economics*, 20(3), 643 - 667.

[8] Battu, Harminder, and Yves Zenou. 2010. "Oppositional Identities and Employment for Ethnic Minorities: Evidence from England." *Economic Journal*, 120(542), F52 - F71.

[9] Bertrand, Marianne, and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." *American Economic Review*, 94(4), 991 - 1013.

[10] Bisin, Eleonora Patacchini, Thierry Verdier, and Yves Zenou. 2011. "Ethnic Identity and Labour Market Outcomes of Immigrants in Europe." *Economic Policy*, 26(65), 57 - 92.

[11] Bleakley, Hoyt, and Aimie Chin. 2004. "Language Skills and Earnings: Evidence from Childhood Immigrants." *Review of Economics and Statistics*, 86(2), 481 - 496.

[12] ——————. 2008. "What Holds Back the Second Generation? The Intergenerational Transmission of Language Human Capital Among Immigrants." *Journal of Human Resources*, 43(2), 267 - 298.

[13] ——————. 2010. "Age at Arrival, English Proficiency, and Social Assimilation among US Immigrants." *American Economic Journal: Applied Economics*, 2(1), 165 - 192.

[14] Booth, Alison L., Andrew Leigh, and Elena Varganova. 2012. "Does Ethnic Discrimination Vary Across Minority Groups? Evidence from a Field Experiment." *Oxford Bulletin of Economics and Statistics*, 74(4), 547 - 573.

[15] Borjas, George J., and Kirk B. Doran. 2012. "The Collapse of the Soviet Union and the Productivity of American Mathematicians." *Quarterly Journal of Economics*, 127(3), 1143 - 1203.

[16] Bowles, Samuel. 1998. "Endogenous Preferences: The Cultural Consequences of Markets and Other Economic Institutions." *Journal of Economic Literature*, 36, 75 - 111.

[17] Carlsson, Magnus, and Dan-Olof Rooth. 2007. "Evidence of Ethnic Discrimination in the Swedish Labor Market using Experimental Data." *Labour Economics*, 14(4), 716 - 729.

[18] Casey, Teresa, and Christian Dustmann. 2010. "Immigrants' Identity, Economic Outcomes and the Transmission of Identity across Generations." *Economic Journal*, 120(542), F31 - F51.

[19] Chiswick, Barry R., and Noyna DebBurman. 2003. "Educational Attainment: Analysis by Immigrant Generation." *Economics of Education Review*, 23(4), 361 - 379.

[20] Cortes, Kalena E. 2004. "Are Refugees Different from Economic Immigrants? Some Empirical Evidence on the Heterogeneity of Immigrant Groups in the United States." *Review of Economics and Statistics*, 86(2), 465 - 480.

[21] Drydakis, Nick. 2012. "Ethnic Discrimination in the Greek Housing Market." *Journal of Population Economics*, 24(4), 1235 - 1255.

[22] Dustmann, Christian. 1996. "The Social Assimilation of Immigrants." *Journal of Population Economics*, 9(1), 37 - 54.

[23] Edwards, Rachel. 2006. "What's in a Name? Chinese Learners and the Practice of Adopting 'English' Names." *Language, Culture and Curriculum*, 19(1), 90 - 106.

[24] Feliciano, Cynthia. 2001. "The Benefits of Biculturalism: Exposure to Immigrant Culture and Dropping out of School among Asian and Latino Youths." *Social Science Quarterly*, 82(4), 865 - 879.

[25] Fryer, Roland G., and Steven D. Levitt. 2004. "The Causes and Consequences of Distinctively Black Names." *Quarterly Journal of Economics*, 119(3), 767 - 805.

[26] Gang, Ira N., and Klaus F. Zimmermann. 2008. "Is Child like Parent? Educational Attainment and Ethnic Origin." *Journal of Human Resources*, 35(3), 550 - 569.

[27] Gao Yihong, Cheng Ying, Zhao Yuan, and Zhou Yan. 2005. "Self-Identity Changes and English Learning among Chinese Undergraduates." *World Englishes*, 24(1), 39 - 51.

[28] Gerhards, Jürgen, and Silke Hans. 2009. "From Hasan to Herbert: Name-Giving Patterns of Immigrant Parents between Acculturation and Ethnic Maintenance." *American Journal of Sociology*, 114(4), 1102 - 1128.

[29] Gordon, Milton M. 1964. *Assimilation in American Life: The Role of Race, Religion, and National Origins*. New York: Oxford University Press.

[30] Guven, Cahit, and Asadul Islam. 2015. "Age at Migration, Language Proficiency, and Socioeconomic Outcomes: Evidence From Australia." *Demography*, 52(2), 513 - 542.

[31] Hanson, Andrew, and and Michael Santas. 2014. "Field Experiment Tests for Discrimination against Hispanics in the U.S. Rental Housing Market." *Southern Economic Journal*, 81(1), 135 - 167.

[32] Jacquemet, Nicolas, and Constantine Yannelis. 2012. "Indiscriminate Discrimination: A Correspondence Test for Ethnic Homophily in the Chicago Labor Market." *Labour Economics*, 19(6), 824 - 832.

[33] Kaas, Leo, and Christian Manger. 2012. "Ethnic Discrimination in Germany's Labour Market: A Field Experiment." *German Economic Review*, 13(1), 1 - 20.

[34] Imbens, Guido W. 2010. "Better LATE Than Nothing: Some Comments on Deaton (2009) and Heckman and Urzua (2009)." *Journal of Economic Literature*, 48(2), 399 - 423.

[35] Imbens, Guido W., and Joshua D. Angrist. 1994. "Identification and Estimation of Local Average Treatment Effects." *Econometrica*, 62(2), 467 - 475.

[36] Larkey, Linda Kathryn, Michael L. Hecht, and Judith Martin. 1993. "What's in a Name? African American Ethnic Identity Terms and Self-Determination." *Journal of Language and Social Psychology*, 12(4), 302 - 317.

[37] Lee, Wai-Sum, and Zee, Eric. 2003. "Standard Chinese (Beijing)." *Journal of the International Phonetic Association*, 33(1), 109 - 112.

[38] Moser, Petra, Alessandra Voena, and Fabian Waldinger. 2014. "German Jewish Émigrés and US Invention." *American Economic Review*, 104(10), 3222 - 3255.

[39] Myers, Dowell, Xin Gao, and Amon Emeka. 2009. "The Gradient of Immigrant Age-at-Arrival Effects on Socioeconomic Outcomes in the U.S." *International Migration Review*, 43(1), 205 - 229.

[40] Nicoll, Angus, Karen Bassett, and Stanley J. Ulijaszek. 1986. "What's in a Name? Accuracy of Using Surnames and Forenames in Ascribing Asian Ethnic Identity in English Populations." *Journal of Epidemiology and Community Health*, 40(4), 364 - 368.

[41] Nordin, Martin, and Dan-Olof Rooth. 2009. "The Ethnic Employment and Income Gap in Sweden: Is Skill or Labor Market Discrimination the Explanation?." *Scandinavian Journal of Economics*, 111(3), 487 - 510.

[42] Olivetti, Claudia, and M. Daniele Paserman. 2013. "In the Name of the Son (and the Daughter): Intergenerational Mobility in the United States, 1850-1930." NBER Working Paper No. 18822.

[43] Oreopoulos, Philip. 2011. "Why Do Skilled Immigrants Struggle in the Labor Market? A Field Experiment with Thirteen Thousand Resumes." *American Economic Journal: Economic Policy*, 3(4), 148 - 171.

[44] Ottaviano, Gianmarco I.P., and Giovanni Peri. 2005. "Cities and Cultures." *Journal of Urban Economics*, 58(2), 304 - 337.

[45] Ottaviano, Gianmarco I.P., and Giovanni Peri. 2006. "The Economic Value of Cultural Diversity: Evidence from US Cities." *Journal of Economic Geography*, 6(1), 9 - 44.

[46] Peri, Giovanni. 2012. "The Effect Of Immigration On Productivity: Evidence From U.S. States." *Review of Economics and Statistics*, 94(1), 348 - 358.

[47] Polavieja, Javier G. 2015. "Capturing Culture: A New Method to Estimate Exogenous Cultural Effects Using Migrant Populations." *American Sociological Review*, 80(1), 166 - 191.

[48] Portes, Alejandro, and Min Zhou. 1993. "The New Second Generation: Segmented Assimilation and Its Variants." *American Academy of Political and Social Science*, 530, 74 - 96.

[49] Riphahn, Regina T. 2003. "Cohort Effects in the Educational Attainment of Second Generation Immigrants in Germany: An Analysis of Census Data." *Journal of Population Economics*, 16(4), 711 - 737.

[50] Rogler, Lloyd H., Rosemary Santana Cooney, and Vilma Ortiz. 1980. "Intergenerational Change in Ethnic Identity in the Puerto Rican Family." *Journal of Population Economics*, 20(3), 643 - 667.

[51] Rubinstein, Yona, and Dror Brenner. 2014. "Pride and Prejudice: Using Ethnic-Sounding Names and Inter-Ethnic Marriages to Identify Labour Market Discrimination." *Review of Economic Studies*, 81(1), 389 - 425.

[52] Shifman, Limor, and Elihu Katz. 2005. "'Just Call Me Adonai': A Case Study of Ethnic Humor and Immigrant Assimilation." *American Sociological Review*, 70(5), 843 - 859.

[53] Sue, Christina A., and Edward E. Telles. 2007. "Assimilation and Gender in Naming." *American Journal of Sociology*, 112(5), 1383 - 1415.

[54] Trax, Michaela, Stephan Brunow, and Jens Suedekum. 2015. "Cultural Diversity and Plant-Level Productivity." *Regional Science and Urban Economics*, 53, 85 - 96.

[55] Waters, Mary C., and Tomás R. Jiménez. 2005. "Assessing Immigrant Assimilation: New Empirical and Theoretical Challenges." *Annual Review of Sociology*, 31, 105 - 125.

[56] Xie, Yu, and Margaret Gough. 2011. "Ethnic Enclaves and the Earnings of Immigrants." *Demography*, 48(4), 1293 - 1315.

[57] Zee, Eric. 1985. "Sound Change in Syllable Final Nasal Consonants in Chinese." *Journal of Chinese Linguistics*, 13(2), 291 - 330.

[58] Zussman, Asaf. 2013. "Ethnic Discrimination: Lessons from the Israeli Online Market for Used Cars." *Economic Journal*, 123(572), F433 - F468.