1　Language, Heritage, and Change

We live in an age of "time–space compression" (Harvey, 1990, *passim*), characterized by a global, multidirectional, and often instantaneous flow of languages and lives. Whether a blessing or a burden, it is now possible and even necessary for us to live in multiple spaces at once, given technological innovations. If there is something that gives us a reliable sense of coherence and continuity between the past, the present and the future and between the here and the there, it is probably the languages that we speak. When we move to new places and meet new faces, either in person or virtually, and we certainly do much of these nowadays, we may or may not carry our luggage, but we always carry with us our language. But what will happen to the languages that we carry with us when we move from place to place? And what will happen to our sense of self and our sense of the world when the languages we know change their sounds and significance over time?

The languages that are naturally and necessarily attached to us from the past as we build our future in new places are often called "heritage languages" (HLs). HLs accentuate the contingency, hybridity, and indeterminacy against essentialist conceptualizations of identities, communities, race, nation, and culture. They compel us to cope with shifting and sometimes conflicting linguistic and cultural identities; to redefine our sense of linguistic integrity and cultural cohesiveness; to navigate and negotiate communicative borders both real and imagined; and to rethink what it means to acquire or abandon a language and, more fundamentally, what it entails to be a productive participant in the sociocultural space that both unites and transcends the country/culture of our birth and that of our choice.

To an individual, an HL may provide valuable personal and familial resources, or it can become a linguistic and cultural liability. There have been substantive debates (Fishman, 1991, 2001; He, 2010; Hornberger, 2004; McKay and Wong, 1996; Wong-Fillmore, 1991) at social and political as well as cultural and linguistic levels on whether HLs should be maintained and whether the loss of HLs is part of the price to be paid for becoming acculturated into the mainstream society. Some communities and individuals have taken active and proactive measures to ensure that their HL is passed

down from one generation to the next, while others have let theirs disappear gradually or almost abruptly.

What are the decisive factors for the success of HL maintenance? What is the role of family language policy and social networks in shaping the trajectory of HL development? Why is it that we often witness a resistance to HL learning when speakers are young but subsequently an embrace of HL after they come of age? What is the relationship between speaker identity (projected as well as perceived, interactional as well as developmental) and the HL learning outcome? How do Chinese-American immigration experience, societal language ideologies, and racial positionings of Chinese-Americans impact Chinese-American households' language choice? Does a certain language choice in everyday interactions in the classroom and at home lead to the socialization of certain cultural values and norms? Is literacy a necessary requirement and condition for HL development? In what ways may heritage language maintenance, and multilingualism in general, contribute to a more civil and more just society?

Understanding such complex human conditions necessitates a kind of research perspective that is naturalistic, observational, and descriptive; that traces language and life in time and space; that contextualizes the notion of "heritage language" in the histories and contexts of its use; and that fundamentally assumes that language should be examined as both the venue and the vehicle for human development.

In this book, I offer a narrative-ethnographic, quasi-longitudinal, and interactionally enriched account of language development and language change in the context of immigration, where different languages, cultures, races, and ethnicities come into contact and sometimes conflict. I present a set of stories about language and life from a group of Chinese-American immigrants and their children of mainland China origin who first arrived in the U.S. in the period between the mid-1980s and the mid-1990s. These stories will be told in large part through the original voices of the storytellers, who are college-educated parents who came to the U.S. to pursue graduate studies or to follow their graduate student spouses, grandparents who joined the parents in the U.S. on a temporary basis, teachers from the mainstream elementary schools and weekend Chinese language schools, and children in various age groups who were either born in the U.S. or came with their parents as infants or toddlers. These are stories about the quest for identity, dignity, and opportunity and about growth and change across languages, lives, geographies, and generations.

Before I delve into the stories, it is important to establish a common frame of reference for our discussion. Let us begin with our conceptual approach to heritage languages and the methodology used to examine how heritage languages are perceived and practiced.

1.1   Being and Becoming

Immigrant languages, along with indigenous or ancestral ones, have been conventionally referred to as *heritage languages* (Fishman, 1991) in ecologies in which another language functions as the dominant vernacular and children of immigrants who speak the immigrant or indigenous language have been conventionally referred to as heritage language speakers (Cummins, 2005; He, 2010; Hornberger and Wang, 2017; Valdés, 2001; Van Deusen-Scholl, 2003; Wiley, 2001). This term *heritage language* has also often been used synonymously with *community language*, *home language*, *native language*, and *mother tongue.* Like other scholars who find the term inadequate or problematic (see Blackledge and Creese, 2008; García et al., 2012; Mufwene, 2016), I myself am not comfortable with the "past" connotation of the term "heritage." "Heritage language" makes immigrant languages sound like repositories of old knowledge, practices, and histories. The term limits our imagination of immigrant languages as agents for language and cultural reproduction and as means of seeing the world that is both deeply grounded and forward-looking (He, 2006, 2013a). However, for want of a more commonly agreed-upon alternative, I will keep the term *heritage language* (HL) throughout the book.

Heritage speakers, typically, have been exposed to the HL since birth and may have used the HL during the initial years in their life and on and off subsequently, but have never developed the full range of phonological, morphological, syntactic, pragmatic, and discourse patterns which will enable them to use it with the scope and sophistication characteristic of and comparable to native speakers' usage (Benmamoun et al., 2013; Montrul and Polinsky, 2021). Throughout its history shaped by immigration, the U.S. has always been characterized by rich linguistic diversity and significant language shift. Even though immigrant cultures may survive in some form into the third and fourth generations, immigrant languages generally experience rapid attrition, if not loss (Montrul and Polonsky, 2021; Potowski, 2013; Rumbaut and Massey, 2014). Most intriguing, given the largely voluntary nature of immigration, the shift from immigrant languages cannot be adequately explicated by external macro societal forces and pressures only; internal individual agency, i.e., the micro-level, evolving, context-specific purposes and significance that speakers attach to their immigrant languages, appears to play a significant role (Avineri, 2014; Curdt-Christiansen and Hancock, 2014; Fader, 2009; He, 2012; Kroskrity, 2016; Li, 1994; Lo, 2004; Tsu, 2010; Zentella, 1997). The trajectory of heritage language development thus casts doubt on existing research on language shift which has generally evoked broadly conceived macro-level variables (such as colonization, industrialization, immigration, globalization, urbanization, assimilation, and national-identity formation) that may accompany and correlate with language shift but are yet to sufficiently explain the

individual motivations, circumstances, and outcomes tied to language shift in specific contexts, as has long been noted by scholars such as Gal (1979), Kulick (1997), Mufwene (2017), Makihara and Schieffelin (2007), and Sankoff (2001).

The conceptual approach to language shift that undergirds this book centers on specific, situated communicative and cultural practices; it consists of two fundamental perspectives: (1) language is both a medium and a catalyst for sociocultural processes, and (2) these processes take place in the manner of rhizomes.

1.1.1   Both a Medium and a Catalyst

In research on language shift, the interactional and linguistic micro processes have received relatively scant attention. However, it is these situated, speaker- and setting-specific language choice and use that constitute language and life in immigrant communities; they can lead ultimately to the abandonment or attrition of heritage languages.

This view is inspired by and anchored in language socialization (Duranti et al., 2011; Ochs, 1986, 1993; Ochs and Schieffelin, 2008; Schieffelin and Ochs, 1986, 1996), which, as a branch of linguistic anthropology, focuses on the process of becoming a culturally competent member through language use in social activities. As formulated by Ochs and Schieffelin, language socialization is concerned with (1) how novices are socialized to use language and (2) how novices are socialized to be competent members in the target culture through language use. This line of thinking offers a synthesis between cognitivist and sociocultural approaches that allows a reconsideration of cognition as originating in social interaction and shaped by cultural and social processes, not just mental ones (Duranti et al., 2011; Watson-Gegeo, 2004). Language use and language contact thus become resources for growth and change, as they turn everyday experiences (both at home and in school) into potential sites that foster transformative practices and preferences in participants. It is in those moment-by-moment give-and-take situations between the children/students and their parents/teachers that socialization becomes a vivid, lived family and classroom experience. The quintessential and intrinsic sociocultural nature is particularly salient in the case of HLs. The very notion of HL is a sociocultural construct insofar as it is defined in terms of a group of people who speak it. HLs also have a sociocultural function, both as a means of communication and as a way of identifying and transforming sociocultural groups (He, 2010). In other words, in the heritage language home and classroom, socialization takes place both *toward* and *through* constantly and locally re-enacted, redefined and reconstructed meanings of "heritage language and culture."

For some, *heritage* as a noun may denote something of the past, something that has a fixed, static, essential property. However, languages change over time, and HLs are no exception. To see an HL as fluid and always in flux with respect to evolving social and cultural conditions is to acknowledge its potential as a critical lens which facilitates our understanding of the construction and reconstruction of identities, communities, and cultures in the human diaspora. Because language indexes culture and identity, as culture and identity acquire newer forms, language also transforms in order to acquire new indexicality, hence creating new values. Given that the heritage culture has a complex, developing, transnational, intercultural, cross-linguistic, and hybrid life, an HL can, like any other language, be thought of as an emergent phenomenon that is constantly engaged in deconstruction and reconstruction processes through the ongoing socialization of its speakers, involving all the participants (He, 2011a). Therefore, instead of reinforcing or endorsing the idea of heritage language and culture as a set of essentialized practices and concepts, I will explore the *transformative* potential of HLs (He, 2006) and examine how HLs enable speakers to acquire new meanings; to actively (re)construct themselves as members of a particular ethnicity, nationality, speech community, social rank, and profession; and to (re-)create a new set of familiar and familial, ethnolinguistic indexicalities, while at the same time being transformed through the evolving practices of their speakers.

1.1.2   Like the Bamboo

In Chinese culture, bamboo is a symbol of formidable strength, interconnected roots, resilient adaptability, and unstoppable growth. Bamboos are rhizomes. Their horizontal growth trajectory is not linear, nor predictable. And this is where the notion of "rhizome" can provide some conceptual guidance for our understanding of HL development.

Instead of identifying universal, definitive patterns of causality, my goal is to demonstrate that language shift (in this case, heritage language attrition or abandonment) can be brought about by changes in personal, familial, and communal values, allegiances, and context-specific language practices across the life span. These values, allegiances, and practices are based on speakers' perceptions of themselves and their world, which in turn may be altered/ modified as a result of the unfolding social/linguistic engagements in the context of immigration and globalization. And these altered/evolving perceptions may ultimately be responsible for appropriation or attrition of immigrant languages. Hence in addition to advancing a dynamic, socio-constructivist view of HL, I further propose to examine the development of HL as a rhizomatic system (He, 2013a; Tan, 2017). The rhizome resists a vertical hierarchical structure in order to promote lateral relations. It allows for a lateral

comparison, not the perpetuation of hierarchical language rivalries held in place by binary opposites. It is a term from biology that has been appropriated by Deleuze and Guattari to emphasize the principles of relationality, connectivity, and heterogeneity (Deleuze and Guattari, 2004: 7). Unlike the imagery of the tree, which is centralized and hierarchical, the rhizome is a system of multiplicity that spreads multidirectionally. Thought, for Deleuze and Guattari, is a rhizome. It is an underground stem that is neither an origin nor an end (Deleueze and Guattari, 2004: 12). It is the middle piece that serves as the initiator, sending out roots and shoots that gradually detach from the source, giving rise to new rhizomes, and fostering a system of proliferations. In embracing the rhizome as a conceptual figure, Deleuze and Guattari portray "thought" as lacking a distinct start or finish, residing in the middle, capable of connecting, engendering new thoughts. Because the rhizome is always in process and spreads in multiple directions and forms a network of communications, it violates any systematic mapping of memory and hierarchical structures of knowledge. And language, according to Deleuze and Guattari, is a typical example of the rhizome. Language, as a means of communication to connect people, communities, and societies, involves multiple sets of heterogeneous elements that are interconnected with other heterogeneous entities. Without a fixed center or a linear path, language evolves and spreads in multiple directions. "Language stabilizes around a parish, a bishopric, a capital. It forms a bulb. It evolves by subterranean stems and flows, along river valleys or train tracks; it spreads like a patch of oil" (Deleuze and Guattari, 2004: 2).

To demonstrate how the rhizome functions as a model for their extrapolation of the philosophy of thought and language, Deleuze and Guattari (2004: 7–17) introduce six characteristics of the rhizome in *A Thousand Plateaus*. They include (1) the principle of connections, (2) the heterogeneity of connections, (3) the principle of multiplicity, (4) the principle of signifying rupture, (5) the concept of mapping/cartography, and (6) the concept of tracing/decalcomania. Setting off new shoots and roots in multiple directions, rhizomes are by nature heterogeneous. Deleuze and Guattari's orientation is compatible with the "*multiplicity hypothesis*" I developed (He, 2006, 2011a) with regard to HL development, in the sense that neither temporally nor spatially is the HL speaker's existence singular, unitary, or noncontradictory. The HL learner/ speaker inhabits multiple worlds and assumes multiple identities that may be overlapping and/or competing. The degree of HL attrition and loss most likely associates negatively with the ease with which the speaker is able to manage the lifelong differences and discontinuities presented by multiple speech roles in multiple, intersecting communities. In other words, greater capacity to adapt and adjust to multiple discourse worlds can lead to greater likelihood of HL maintenance.

To learn and speak an HL means not merely to command the phonetic and lexico-grammatical forms in both speech and writing and to master a static set of discourse rules and norms; it also means to understand or embrace a set of continually evolving norms, preferences and expectations relating linguistic structures to multifaceted, dynamic, and fluid contexts. Heritage language learners' acquisition of linguistic forms and structures is thus a developmental process of delineating and organizing complex (and often conflicting) contextual dimensions in continually evolving, culturally appropriate, and meaningful ways. An approach drawing upon both Ochs and Schieffelin's notion of "language socialization" and Deleuze and Guattari's notion of "rhizome" views language learners as tuned into certain indexical meanings of linguistic forms that link those forms to, for example, the social identities of interlocutors and the related types of social events. This approach relates a learner/speaker's use and understanding of linguistic forms to dispositions, preferences, beliefs, and bodies of knowledge that organize how information is communicatively packaged and how speech acts are performed within and across explicable, though unpredictable, contexts. In this view, HL learning involves acquiring repertoires of language forms and functions associated with complex and changing contextual dimensions (e.g., evolving and shifting role relationships, identities, acts, and events) over developmental time and across space (He, 2013a, 2016b), which calls for a serial, narrative, ethnographic mode of inquiry. In the remainder of this introductory chapter, I will specify this research methodology before presenting an outline of the book.

1.2   Serial Narrative Ethnography

Many of the big questions in heritage language research concern cause and effect. How does immigration affect one's identity and language choices? How does a particular language policy (whether at the state level or within the family) affect one's ability to use the immigrant language? These questions are difficult to answer due to the lack of comparisons. We do not know what would have happened if a specific individual had not immigrated somewhere else or if that specific language policy were not in place. A quick review of existing research on heritage language learners and learning reveals that many empirical studies use tools such as surveys, questionnaires, interviews, and interactions, which are usually cross-sectional in nature. Using them, researchers analyze data of variables collected at one single given point in time across a sample population or a predefined subset in order to measure factors such as heritage language learner motivation, identity, attitude, aspirations, challenges, family language ideologies, and policies. The research participants in a cross-sectional study are typically chosen from an available

population of potential relevance to the research question. There is no prospective or retrospective follow-up of participants over time. While these studies successfully capture the participants' positions and practices at specific moments and effectively establish preliminary bases for more in-depth research, they can be limited by low response rates (surveys and questionnaires), sampling bias (interviews), and snapshot-based transiency (interactional studies). As a result, it is often difficult for researchers to make a causal inference.

While it is generally acknowledged that modern science began with the introduction of experimental research methods, in social sciences and humanities, due to the complexity of human behavior and the human world, this method brings its challenges. For both methodological and moral reasons, we cannot, for example, randomly assign research participants to different groups with respect to parents' English language proficiencies or family language policies.

The speakers of Chinese as a heritage language (CHL) and their families presented in this book are the ones I have encountered, observed, and investigated in my ethnographic research over the last two decades. Sequencing these stories along the speakers' developmental path from early childhood to early adulthood, I will present observational, interview, reported, and audio-/video-recorded data that have been collected in settings and situations that CHL speakers experience across their life spans. I call this qualitative approach to research on heritage language development "serial narrative ethnography" (SNE). It integrates methods of narrative analysis with field-based, interaction-enriched methods of linguistic anthropology and draws inspiration from a number of existing methodologies used in the social sciences (detailed below). In SNE, narrative-ethnographic data are collected from the same demographic group at different time points of the population's development. At each developmental time point, the researcher takes a different sample (different participants) of the target population, generating aggregate data that are not only "thick" but also "long," thereby enabling the analysis of the demographic group across space and time. The goal is to draw general and generalizable knowledge from detailed, discrete, and sometimes disparate observations and accounts.

1.2.1   Precursors

Before I detail how SNE is operationalized, let me first review several quasi-experimental research methods sensitive to the particularities of social sciences and humanities that have served as precursors to SNE, including natural experiments, ethnographic experiments, repeated/serial cross-sectional studies, and tracing participants across settings and events.

1.2.1.1   Natural Experiments   Historians of science have demonstrated the diverse range of styles of observation and experimentation (Galavotti, 2003) that challenged the laboratory as the exclusive domain for knowledge production. It has been shown that it may be possible to address difficult cause–effect questions using *natural experiments*, which are observational studies in nature that take advantage of the random or seemingly random assignment of research participants to different groups to address specific research questions. It examines cases in which two otherwise similar groups of people have been distinguished by one particular circumstance. David Card, an economist, for example, has analyzed the labor market effects of minimum wages, immigration, and education. His results showed, among other things, that increasing the minimum wage does not necessarily lead to fewer jobs, that the evidence for the claim that immigrants harm native opportunities is slight, and that the fear that post-1965 immigrants will never assimilate is belied by the educational success of their children (Card, 2005). Similarly, the COVID-19 pandemic has presented a huge opportunity for natural experiments in medical sciences (Ernst et al., 2022) and social sciences (Hawdon et al., 2020).

Natural experiments are often used to study situations in which controlled experimentation is not possible, for practical and ethical reasons, such as when the experience of global immigration or policy changes cannot be assigned to research participants. Data from a natural experiment can be difficult to inter-pret, however. For example, extending heritage language classes by an hour each week for one group of students (but not another) may not affect everyone in that group in the same way. Some students would have kept studying their heritage languages anyway and, for them, the value of heritage language education is often not representative of the entire group. So is it even possible to draw any conclusions about the effect of an extra hour of class in the heritage language school? Rather than basing work on models that make large assump-tions about human behavior, researchers using natural experiments rely only on empirical data that illuminate causal relationships in society. Another econo-mist, Joshua Angrist, uses natural experiments to study the effectiveness of high schools. While it is not possible or ethical to randomly assign students to different schools, if, in the event that a school district line is redrawn, instantly transferring one group of students to a new school, it will create a natural delineation of cause and effect that isolates the schools' impact (Dizikes, 2013). For my purposes, my research participants' immigration from China to the U.S. affords a rich opportunity for a natural experiment on language shift, except that, unlike the cases with the economists mentioned above, the data I am looking for are not quantitative or numerical, but qualitative and ethnographic.

1.2.1.2 Ethnographic Experiments While ethnography as a research approach is most commonly associated with fieldwork and participant observation, the conventional anthropological fieldwork and participant observation of naturally occurring events can be supported and strengthened by intervention and elicitation, whereby the researcher and the research participants collaboratively identify and articulate research questions and jointly produce ethnographic knowledge that is meaningful to both the researcher and the research participants. The idea of ethnographic experiments gained momentum during the "reflexive turn" in anthropology during the 1980s (Clifford and Marcus, 1986, cited in Estalella and Criado, 2017; Marcus and Fischer, 1986), which prompted a rethinking of construction and representation of knowledge and a critical assessment of the epistemic duality of experimentation and observation. Consequently, observation and experimentation are considered complementary and not contradictory, as evident in both anthropological written genres and the site of fieldwork itself (Marcus, 2014, cited in Estalella and Criado, 2017). In my work, as specified below, narrativizing the ethnographic data, including reflections, reports, and recordings of interactions from the participants, will be an important form of intervention in the norm and form of representation. In the spirit of ethnographic experiments, I will bring to the foreground a reconsideration of the role of ethnography and the role of the research participants in the production of knowledge concerning HL practices. I will actively engage not only with the participants' experiences, but also with their expertise while experimenting with new modes of conceptualization through their perspectives and new modes of presentation through their voices.

1.2.1.3 Repeated, Serial Cross-sectional Study As my work aims to explore development and change over time, I also draw inspiration from a subtype of cross-sectional study, known as the repeated (or serial) cross-sectional study, which has been effectively employed by researchers in social sciences (e.g., Lebo and Weber, 2015). Whereas longitudinal studies follow the same sample of research participants over time even when participants move location, cross-sectional studies interview a fresh sample of participants each time the studies are carried out. Cross-sectional studies (e.g., surveys) are repeated at regular (weekly, monthly, quarterly, annually, or longer, such as three-yearly) or irregular intervals so that estimates of changes can be made at the aggregate or population level. Examples include monthly labor force surveys, retail trade surveys, television and radio ratings surveys, and political opinion polls. These surveys are designed to give good estimates for the current population and the changes or movements that have occurred since the last survey or previous surveys. In all cases, repeated cross-sectional data are created where a study is administered to a new sample of participants at successive time points. For an annual survey, for