In 1909 Wu Zhihui, a proponent of Esperanto and well-known anarchist of twentieth-century China, predicted the future of global languages. Though the nationalization of the Chinese language was still pending, Wu expressed concern not for its imminent standardization but for its eventual global viability. The outlook was not rosy:

Not only is the Chinese language not phoneticized, it is also not easy to typeset or index. This is a tremendous obstacle to the dissemination of civilized modernization and the governance of all things. . . . Looking up Chinese characters takes great effort indeed. Regardless of the index system and classification scheme, it is very difficult to memorize them. Moreover, there are too many characters. . . . Western writing has one great advantage, which became clear as the greatest disadvantage of the Chinese language only with the advancement of machine technology. A typewriter can be used with Western scripts but not with the Chinese language. . . . Sooner or later the Chinese script has to be abolished.

(51, 36, 37, 52; my trans.)

Wu’s radical view on Chinese writing was neither singular nor outlandish in the early twentieth century. During a time of dynastic ruin and the nation’s birthing pains, deep doubts regarding traditional values and practices were widespread. The urgent focus on the Chinese writing system as an impediment, however, occupied a special place. Revamping the Chinese writing system not only held the key to the practical matter of introducing foreign knowledge into China in translation. It also shared in a deeper philosophical and reformist concern with how to open up China to the world through forging new connections. That how, in fact, constituted a question in its own right. As medium and a means of material access, language was about to assume an unprecedented role in defining the rules of a
modern local-global nexus. Though this trajectory was curtailed by the immediate needs of nationalism for a national language in 1913, it found a different outlet of expression in the cold war geography of the 1940s. The result far surpassed its original nationalist conceit.

As the current scale of migration and globalization continues to confront our accustomed notions of national territoriality and its corresponding language and literature, an examination of how certain projects of standardizing the Chinese language in the twentieth century developed against the grain of area-specific, territorialist thinking has much to offer. This essay makes a case for the mobilization of a new kind of area studies. Uncovering the institutional history of the Chinese national language as an outside corollary to the development of area studies, I analyze the technological and global process through which Chinese, an ideographic language, crossed over into an alphabetic terrain at a time when area studies, in contrast, steered toward becoming a nation-based and language-dominant discipline.

Just as the division of languages along national lines gained institutional force in the various national movements around the world in the 1950s and 1960s, a greater infiltration of writing systems was afoot. While critiques of area studies have generally focused on the problem of the strategic partition of the world space into geographic units of knowledge production, I argue that the neglected issue of how a given language corresponds to an area of cultural jurisdiction articulates a greater prejudice, a prior condition that leads to the perception of areas as the spatial embodiments of civilizational differences. How, then, does the assumption of a national language govern one’s assumptions about the medium and practice of the associated national literature or area study?

In an atmosphere where area studies has been repeatedly vilified, a proposed new area studies must no doubt start by addressing the same objections as the old. Area studies has been commonly understood as arising from the political geography of the new world order after World War II (Fenton, “Integration”; Nugent). The division of areas such as East Asia, South Asia, and Southeast Asia did not make sense in the longer history of interregional relations, and it was not primarily intended to. The main purpose was to gather intelligence and to identify areas of strategic interest to the United States in order to further the uncertain political agenda of the cold war. The extraction of knowledge from the partitioned areas aimed to fragment, not to observe, the historical adjacency of cultures. As scholars have shown, the combined efforts of philanthropic and research organizations, like the Rockefeller and Carnegie Foundations, the Social Science Research Council, and the American Council of Learned Societies, and military initiatives, like the Army Specialized Training Program, helped build these politically defined areas into niches of intellectual inquiry. That such area-based studies were doomed from the start to be second-class citizens in the intellectual disciplines into which they were inserted, such as philosophy and the social sciences, has been the subject of much debate and discussion.

Recently, area studies found both an ally and a detractor in the discourse on globalization. Theories on the general impossibility of isolation in globalization offer, at first sight, a way out of the ideological treatment of areas as inert, territorial, and bound spaces. Critics such as David Harvey and Neil Smith have at the same time warned against the temptation to homogenize the idea of free flows, which drowns out the specific political and social forces that reerect spatial paradigms even as they seemingly tear down old ones. Academics in recent years, similarly, have attempted to revitalize the primacy of “place” in area studies in relation to the dominant geography of capitalist globalization (Chiu; Shih; De Neve and Donner; Featherstone). In this re-
spect, area studies has been on the cusp of an important transformation, though as yet undecided between claiming for itself a unique culture-specific mandate or seeking out alliances in diasporic, sinophone, hemispheric, or oceanic studies. Adapting the circuit of spatial thinking to accommodate modulating scales of locality makes place-based studies an attractive option.

While rallying at the margins has its supporters, the drive for alternatives appears to overlook an important opportunity. The move to stake out a disciplinary and theoretical livelihood somewhere else in fact cedes the battlefield to the existing divisions of academic labor, which is right where space happens. Few conventions have been more foundational or divisive than the very assumptions that organize the intellectual and geographic space from which one operates—its borders, content, literary tradition, language, and history—as a disciplinary home. The failure to see place as part of the conceptual matrix of global spatialization risks perpetuating the presumed asymmetry between global space and local place, as Arif Dirlik points out. Symmetry here implies not a desired equilibrium or stagnancy but a struggle on multiple frontiers with the main goal of keeping that tension dialogic. Following Harvey and Smith, Dirlik reminds us that the reason “place” or locality can be celebrated now is that it is already embedded in “new forms of supraplace relationships” (37). It would be missing the point, in other words, to imagine that the discovery of relatively untouched terrains, alliances, or forgotten local communities would surprise us with an unthought-of alternative to capitalist modernity and its geographic rescaling. The battle is here and now.

Even if not everyone agrees where the launching point should be—inside the capitalist geography or outside in an untamed cultural space of the other (Meng)—most would allow that area studies does well to mobilize itself as a unique locus for making visible how global and local forces come together, dissolve, or proliferate in cooptation. But what more can area studies do than provide a setting, however elevated to “supraplace,” however hybrid and open to the fluidity of networks? If we have moved beyond spatialization in the traditional sense, what undergirds the movement between or across localities? What could serve as a new gauge for intraplace comparisons that would at once demystify fixity and account for the necessity of a rooted practice? I offer below a possible response by recasting these questions in a context perhaps more important than the original spatial definition of an area—language.

When area studies was outlined, language was not seen as one of its most important ends. The classical study of Greece and Rome, a precursor of area studies, included “studies in the history, the philosophy, the fine arts, the geography, the politics, and other aspects of the classical world, in addition of course to the basic offerings in language and literature” (Hall 12; emphasis added). When modern area studies was discussed in a 1947 pamphlet published by the Social Science Research Council (SSRC), it had already been launched at several universities before World War II. To be sure, the war’s aftermath intensified its development. The process, however, was less even-handed or ideologically coherent than has been assumed. A striking ambiguity resides in the fact that the nature of an area itself was ill defined. As Charles Wagley tentatively stated in another SSRC pamphlet, published a year later, “[T]he geographical unit which is the subject of such interdisciplinary area research may vary in accordance with the specific problem which is being attacked. An ‘area’ may be a nation, a culture area, an ecological unit, or a subdivision of any of these” (49).

This loose explanation hardly offers a coherent concept. If anything, Wagley’s statement confirms that area has little to do with cartography. His attempted definition suggests a more interesting conception of area,
which is a differentiation of and interaction among scales: national territoriality, cultural zone, ecological unit, and any smaller division or greater combination thereof. Wagley therefore treats nations not as the primary occupants of areas but—underscoring the open-endedness—as makeshift and ever adaptive containers for a fluid content. If an area is thus conceived, what does one do with the language that is supposed to go with it? How does one conceptualize larger or smaller divisions of language in relation to the scale of areas?

In fact, the crucial subject of language and the geographic inconsistency of its native origin dropped out of discussion, largely because the pragmatics of conducting research in non-Western area studies restricted the discussion to its utilitarian dimensions. Advocates of the new subdiscipline had to resolve an immediate problem. Language proficiency became the prerequisite to acquiring any knowledge about the area in question. Subsidiary yet instrumental, language study stood for a linguistic science, akin to “the biography of a nation” (Hall 14). Already in 1944 Robert Redfield observed, “[W]ithout knowing the language of a people, we never really know their thoughts, their feeling and their type of character” (5). His statement encouraged the belief that the thoughts, feeling, and character of a people were fully knowable through language, a guarantor of authentic knowledge. This instrumental concern soon occupied the foreground. It naturalized the relation between a national language and a given area. When Robert B. Hall submitted his SSRC report, in 1947, he noted the changing attitude. Though originally intended to be not “an end in itself, but rather . . . a means by which the larger task would be accomplished,” language study and teaching became the preeminent task (14). In ways that would plant the seeds for later critiques, language rose as the exclusive offering of area studies, a discipline that claimed language as its specialty or its edge over branches of knowledge in which it was treated as a subordinate latecomer.

Despite the narrowing focus on language as the primary objective of area studies, the idea of linguistic nativity—or language as the natural property and exclusive essence of a people—was being undone elsewhere. Just as area studies took shape institutionally and politically as the spatial coordinate of a geographic-linguistic convergence (Russian studies, Chinese studies, etc.), a different linguistic project advanced in an almost opposite direction in another corner of military-related research. It is well known that the Army Specialized Training Program was among the government-sponsored initiatives responsible for treating foreign language studies as a key to “the culture of enemy or occupied territory” (Fenton, “Area Studies” 264), but not all linguistic research was geared to the good, old-fashioned surveillance mode of knowledge production (Keefer 457–61). In the aftermath of World War II, a new possibility loomed. Language was targeted as a medium of infiltration. This is where the Chinese language entered the game.

On 4 March 1947, Warren Weaver, a mathematician who was the director of the Natural Sciences Division of the Rockefeller Foundation, wrote to the cyberneticist and linguist Norbert Wiener about an idea for overcoming linguistic barriers and enhancing international understanding:

A most serious problem, for UNESCO, and for the constructive and peaceful future of the planet, is the problem of translation, as it unavoidably affects the communication between peoples. . . . Recognizing fully, even though necessarily vaguely, the semantic difficulties because of multiple meanings, etc., I have wondered if it were unthinkable to design a computer which would translate. . . . [O]ne naturally wonders if the problem of translation could conceivably be treated as a problem in cryptography. . . . [I]t is very tempting to say that a book written in Chinese is simply
a book written in English which was coded into the “Chinese code.”

Widely acknowledged as the initiator of the research on machine translation, or automatic translation, in the immediate postwar period, Weaver saw it as a new answer to the problem of cultural and linguistic obstacles. Machine translation might not only remove the most “serious deterrent” to “international understanding” but also bypass the “multiplicity of language” altogether (1). Weaver referred to the Tower of Babel to underscore the extraordinary potential payoff of this technological ambition. Wiener was skeptical of the project’s feasibility, but Weaver pressed on. Among the first two hundred people to whom he sent his famous memorandum, “Translation,” a sinologist named Erwin Reifler volunteered with great enthusiasm. Reifler’s assertion that certain Chinese characters expressed the same double meanings as some words in English in part inspired Weaver’s belief in the capacity of machine translation to overcome the greatest linguistic gulf possible.

The idea acquired a life of its own. The United States Air Force supported the research on Chinese-language machine translation early on and concluded that a system for readily indexing Chinese characters was needed. They did not have to look far. Independent of machine translation and motivated by China’s own linguistic needs, Lin Yutang, the best-known Chinese anglophone writer in America in the first half of the twentieth century, filed a patent application for a Chinese typewriter on 17 April 1946. His device provided the answer to an important problem in machine translation research. Lin designed a keyboard with seventy-two keys, encoded in character radicals rather than alphabetic letters. Departing from all existing systems of classification, he took ninety thousand characters and divided them into simple top and bottom components, each of which was assigned to one of the seventy-two keys. Even a typist who did not know Chinese could quickly compose a logograph by identifying its top and bottom parts. Lin lectured widely and demonstrated his new typewriting machine throughout the United States, winning praise from Popular Mechanics, Popular Science, the Rotarian, and many other journals. Headlines described the invention as conquering a notoriously difficult language and aiding China’s war on illiteracy. A photograph of Lin, pipe in hand, standing behind his daughter and looking on as she ably demonstrates the accessibility of the “Mingkwai” (“clear and quick”) typewriter, lent the invention credibility (“Chinese Typewriter”).

Contrary to Wu’s fear in 1909, Lin discovered a way to mechanize the writing of Chinese, moving the language onto a platform on which alphabetic technology had reigned supreme. This breakthrough gave Chinese entry into an intensifying political rivalry between Western and Eastern cultures, a rivalry that often relied on the propagation of irreconcilable differences such as the gulf between the so-called ideographic-pictographic and alphabetic-phonetic writing systems. Lin’s ingenious keyboard refuted this myth of difference and culminated years of research comparing Chinese and European languages. He used the character index to address the problem of intercommunication between ideographic and alphabetic scripts. The basic challenge lies in the fact that a logograph is composed of simpler components, including the main radical. Using just the radical to look up a word in the dictionary remains a popular method today. Still, one has to know what a character looks like to know what its radical is. Lin, in contrast, devised a system that could be used by any nonnative. It did not require knowing the characters beforehand and could be used even by typists who did not understand the language. His earlier experiments had produced astonishing results, using stroke orders to spell out characters according to a linear logic—\textit{aa, ab},
ac, ad, and so on. Cai Yuanpei, an influential contemporary, applauded Lin for “using the example of the alphabet and applying it to the strokes of the Chinese script” (277; my trans.).

Lin’s system not only dispels the orientalist myth of the inscrutability of ideographic writing that was ingrained in the European and American imagination, from John Webb’s assertion of the Chinese language as the pre-Babelian lingua franca and John Wilkins’s logic-based “Real Character” in the seventeenth century to Ezra Pound’s and Marshall McLuhan’s interpretations. It also intervened in alphabetism at a time when language was identified as the primary obstacle to infiltrating minds in foreign cultures. A similar preoccupation with national threat drove state building in China: the Chinese language underwent its most drastic simplification and romanized standardization during the same period. Neither of these exclusively national frameworks gives an accurate glimpse into the looming global competition to control the linguistic medium of transnationalization. Instead of approaching languages one by one to divide and conquer discrete areas, Lin’s typewriter partook in a simultaneous movement sponsored by the United States military and, later, corporate research to build the technological capacity for generating a transcode and grammar to decipher all languages. The project bypassed altogether the spatial organization of area thinking in a race to stake out a global medium for a universal code.

In 1960 IBM took over the project for further development and outsourced parts of it to various American universities. Gilbert W. King, the director of research of the project at IBM, consulted Reifler’s work at the University of Washington and developed, with his team, an optical retrieval system that greatly enhanced the storage of Lin’s keyboard and the speed of composing characters on it (King and Hsien). In the summer of 1963, IBM unveiled its own “Sinowriter,” jointly developed by the Mergenthaler Linotype Company, which had bought the rights to Lin’s keyboard in 1951 but found the overhead too expensive for mass production. Reifler continued to carry out his commitment as a principal investigator into the linguistic conditions for Chinese automatic translation, eventually completing a two-volume report for the National Science Foundation in 1962.

Attracting the dedication of linguists, sinologists, mathematicians, and philosophers, machine translation was the beginning of an extraordinary age. With Google Translate at one’s fingertips, it is easy to forget the implications for language specialization in area studies that arise when the notion of authenticity and its pragmatic consequences no longer attach to the idea of native speakers and mother tongues. The picture grows more complex when one considers the countless other tongues and uninstitutionalized languages, like dialects, minority idioms, and pidgins—pidgin English was once championed by Lin as the true and living global lingua franca—that remain to be reckoned with in the sinophone and anglophone worlds. Global English and global Chinese face their own further diffusion and deauthentication around the world in mixed postcolonial, diasporic, and technological contexts. The history of the modern Chinese language, in particular, never resolved the question of dialects: language reformers basically shelved this question as they pushed for national language standardization from the 1920s on. As nationalization now shows signs of giving way to the unraveling of standardization histories and their polymorphous strands of origin and diffusion, language returns to multiplicity as the starting norm.

What might this return mean methodologically for the survival or reinvention of area studies in a new form? As areas welcome the prospect of expansion in the era of globalization, they also create new tensions that come with the opening of new passageways. Some of these tensions take the form of in-
ternal ruptures, generated by new intimacies between once distant minority groups and the recovery of diasporic communities. In the sinophone world, linguistic and cultural clashes that garnered little attention on the world stage are now emerging as the most powerful forces of division and conglomeration in interplace dynamics (Tsu). Coupled with the increasing rivalry for global linguistic dominance through technology and media, languages—and their parallel histories of standardization, institutional dissemination, and mutual infiltration—come to the fore as the most pressing concern for the international understanding that Weaver and others only began to address. In this light, the once limiting, naturalizing linguistic mandate of area studies moves to center stage as a valuable source of pluralism. Far from reinforcing long-standing disciplinary entrenchment, the new area studies opens the way to a deeper historical engagement across a broad interdisciplinary base.

NOTE
1. Reifler was involved in the project for a long time and subsequently commissioned by the National Science Foundation to write a report on the conditions for Chinese-English automatic translation.

WORKS CITED

