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Supply-Side Sushi: Commodity, Market, and the Global City

Urban anthropology has been simultaneously challenged and transformed as forces of globalization—variously defined in economic, political, social, and cultural terms—have been theorized as "de-territorializing" many social processes and trends formerly regarded as characteristic of urban places. Against a seemingly dis-placed cityscape of global flows of capital, commerce, commodity, and culture, this paper examines the reconfiguration of spatially and temporally dispersed relationships among labor, commodities, and cultural influence within an international seafood trade that centers on To-kyo's Tsukiji seafood market, and the local specificity of both market and place within a globalized urban setting. [Tokyo, markets, food culture, globalization]

Historically, of course, market and place are tightly interwoven. At its origins, a market was both a literal place and a symbolic threshold, a "socially constructed space" and "a culturally inscribed limit" that nonetheless involved a crossing of boundaries by long-distance trade and socially marginal traders. But markets were also inextricably bound up with local communities. In feudal times and beyond, local markets occupied a specific place and time. . . . The denseness of interactions and the goods that were exchanged offered local communities the material and cultural means for their social reproduction—that is, their survival as communities. . . . [T]he social institutions of markets and places supported each other.

—Sharon Zukin, Landscapes of Power (1991:9)

Market and Place

The past tense in Sharon Zukin's paraphrase of Karl Polanyi is no doubt deliberate. Markets and places no longer support each other, we think. If Wall Street and the globalization literature are both to be believed, markets are now literally utopian—nowhere in particular and everywhere all at once.

Globalization is a much-discussed but as yet poorly defined concept. The presumed conditions of globalization include, to my way of thinking, the increasing velocity of capital (both economic and cultural) and the corresponding acceleration of transportation and telecommunications, all stitching together ever larger, ever more fluid, ever more encapsulating markets and other arenas for exchanges across multiple dimensions. Facilitating the velocity and frequency of such exchanges are the dispersal (and relative density) of people living outside the cultures or societies of their origins and the increased potential that exists for

bi-, cross-, or multi-societal/cultural agents and brokers to effect linkages. Accompanying these changes (perhaps another way of saying the same thing) is the rapid cross-fertilization and "arbitrage" of cultural capital (in Bourdieu's [1984] terms) across many seemingly disparate domains of media, belief, political action, economic organization, and so forth, often in unintended or unanticipated ways. These phenomena increasingly occur within arenas that are global or *trans*national rather than *inter*national, precisely because these trends together diminish the nation-state as the sole or primary or uncontested organizing principle, mediator, arbiter, conduit, or framing institution for transactions and interactions across societal or cultural boundaries.

A critical question for anthropologists concerned with urban studies, therefore, is the extent to which forces of globalization have altered or will alter the role of cities as central nodes in the organization of regional, national, and inter- or transnational flows of people, material, ideas, power, and the like (cf. Waters 1995; Hannerz 1996; Hansen and Roeber 1999). The idea of globalization is intimately linked to markets, as are cities. What, then, is (or will be) the relationship among cities, markets, and globalization?

Throughout history, cities and markets have sustained each other, the former providing location, demand, and so-cial context for the latter; the latter providing sustenance, profit, and cultural verve to the former. Many anthropological studies of markets have focused primarily on decision making within them (Peterson 1973; Plattner 1985, 1989) or on institutional structures of their organization (Acheson 1985), although some market ethnographies relate the operations of a specific market to its urban locale and wider social-cultural milieu (e.g., Clark 1994; Geertz

1979). On a more abstract level, the interrelationships between markets and urban life along both economic and cultural dimensions have attracted much attention. Robert Redfield and Milton Singer (1954) analyzed "the cultural role of cities" and defined the marketplace as the sine qua non of what they called the "heterogenetic city," the type of city that links itself (and the society of which it is a center) to a wider world and, in the process, transforms the city, the rural hinterlands that supply it, as well as its society more generally. In analyses that are much more explicitly economic and geographic, central place theory—as developed in anthropology by G. William Skinner's studies of Chinese society (1964-65, 1974)—has focused on spatial, political, economic, demographic, and cultural hierarchies among towns and cities, specifically in terms of the relationships established among those places as marketplaces.

More recently, transnational economic, political, and social forces seem to be eroding the distinctions among cultures and societies that are implied by the Redfield-Singer perspective on cities as engines of change in the midst of distinctive and separate societies/cultures. Examining the contemporary ebbs and flows of global culture, Arjun Appadurai conceptualizes transnational flows of culture as "ethnoscapes," "technoscapes," "finanscapes," "mediascapes," and "ideoscapes" (Appadurai 1990). Very roughly, these refer to the complicated tides and undertows of people(s), of technology, of capital, of media representations, and of political ideologies that concurrently link and divide regions of the globe. Appadurai's vision of global integration (or disintegration) implies a deterritorialized world in which place matters little, but in which there are loosely coupled domains—"scapes"—across which a varied repertoire of influences may travel quickly, in many directions almost simultaneously. Appadurai's perspective does not give priority to one "scape" over another—economics need not trump media, nor need cuisine be subordinate to ethnic identity—and he recognizes that in the welter of global interactions, what may be the center or disseminator of influence in one "scape" may be simultaneously the periphery or recipient of influence across another "scape."

Ulf Hannerz ([1993]1996) makes similar points about globalization and transnationalism, but he refocuses them as processes mediated through world cities and the ways in which these trends of change, integration, and diversification, including the very significant impacts of trade and business, are the vehicles for massive cultural diffusion and creativity that are articulated through urban centers. Appadurai's work points me toward the question of how globalized markets and trade channels intersect simultaneously along complexly interrelated dimensions or scapes of commerce, culture, and people. And Hannerz, in turn, prompts me to ask how these institutions reformulate the kinds of linkages among urban centers, or between nodes

and scattered hinterlands, that generate new forms of urban culture, globalized but intimately rooted in local activities.

Technicians of Globalization

I examine these shifting relationships among globalization, markets, and cities through a study of the transnational tuna trade and the commodity chains that constitute it. This trade centers on Japanese markets, especially Tokyo's Tsukiji wholesale market, the world's largest market for fresh and frozen seafood, and I focus in particular on the trade in Atlantic bluefin tuna.

My research focuses on middlemen (and they are almost all men, in my experience) in this trade, on the Japanese, Korean, American, Canadian, and Spanish buyers, dealers, agents, and other intermediaries who articulate the connections between producers and markets (and through markets, eventually to distant consumers). Viewed from a perspective that keeps these traders in the foreground, one can observe an enormous amount of institutional structure in constant play, swept along by flows of capital, both financial and symbolic, in multiple directions. I should underline the point that this is not a study of consumption or production per se. It is about distribution—what Hannerz refers to as "provisioning relationships" (1980)—enabled by the guys in the middle who make the system what it is, not as producers of the system but as technicians of globalization.

Through these traders, the commodities they trade, and the connections they make, I focus on the articulation of markets and urban places in a globalized environment. On one level, I am interested in how transnational networks of trade form as institutions or social structures that complexly link previously unarticulated segments of local economies, societies, and polities. On another level, I am particularly interested in the ways in which such networks or commodity chains—and the markets they flow through—are inherently cultural in their processes and effects.

In many distribution channels or commodity chains that anthropologists have examined, the particular cultural idioms and linkages have been within an ethnic group that recognizes itself as possessing common identity. Robert Alvarez, for example, demonstrates the deployment of cultural identities and patterns of relationship as a means of integrating long-distance trade in chiles across the Mexican-U.S. border (1994, 1999, 2001), just as Abner Cohen illustrated the salience of ethnicity among Hausa producers and traders in agricultural trade in Nigeria (1969). Both of these examples involve commodity chains that are built around or sustain cultural affinities or similarities, but the Atlantic bluefin tuna trade relies on cultural flows that cross national, societal, and cultural borders. That is, in this instance of globalization, the commodity chain itself shapes the framework for cultural interaction and influence against a broader background of cultural dissimilarity and the imaginative possibilities that creates.

I argue that market and place are not disconnected through the globalization of economic activity, but that they are re-connected in different ways. The process creates spatially discontinuous urban hierarchies in which Halifax, Boston, Pusan, and Cartagena are close neighbors in the hinterland of Tokyo, distant—on this scape—from Toronto or New York or Seoul or Madrid.

At the same time, however, these re-connections and juxtapositions create continuous economic and informational flows, as well as cultural images and orientations. The cultural processes involved include the imagination of commodities in trade, as items of exchange and consumption, as well as the imagination of the trade partner and the social contexts through which relationships are created, modified, or abandoned. Markets and urban places continue as the central nodes in the coordination of complex multiple flows of commodities, culture, capital, and people.

Examining these flows requires a form of transnational ethnography that resembles what George Marcus (1998) refers to as "multi-sited ethnography." Fundamentally, the challenge of such research is to do justice to the complex global phenomena at hand but also preserve the ethnographic richness of in-depth understandings of the diverse local systems that necessarily make up a global system. The risk is that such research may become little more than "drive-by ethnography," but the potential pay-off is to grapple productively with the local in the global and the global in the local.

My own fieldwork has taken me to the auction floors of the Tsukiji market, on docks in New England, into hearing rooms in Washington, D.C., to trade shows in Boston, into markets in Seoul, aboard supply boats in the Straits of Gibraltar, and inside refrigerated warehouses at Narita's airfreight terminals, among many other places. This is a multi-sited ethnography organized around the global flow of a specific commodity, and it is the commodity that integrates the ethnographic perspectives I employ.

The Political Economy of Bluefin Tuna

To start, I must explain something about Atlantic bluefin tuna themselves.

Atlantic bluefin tuna ("ABT" in the trade notation; Thunnus thynnus in biological terms) are a pelagic species that ranges from roughly the equator to Newfoundland, from Turkey to the Gulf of Mexico. Atlantic bluefin tuna yield a firm red meat, lightly marbled with veins of fat, highly prized (and priced) in Japanese food culture. Atlantic bluefin tuna are almost identical to the bluefin tuna (honmaguro or kuromaguro in Japanese) that migrate through the waters around Japan. Both Atlantic and Northern Pacific bluefin are genetically very similar to another

species found in the Pacific, known as Southern bluefin (Thunnus maccoyi; minami maguro or indo maguro), which are common in waters around Japan, as well as near Australia, New Zealand, and many other parts of the Pacific, Indian, and Southern Atlantic Oceans. I should note that all these bluefin tuna are quite distinct from albacore tuna (Thunnus albacares)—often found in little cans—in terms of size, taste, methods of fishing, customary fishing grounds, affinities for dolphins, environmental regulations, and markets.²

Regardless of subspecies, bluefin tuna are huge fish; the record for an Atlantic bluefin is around 1,200 pounds (roughly 540 kilograms). In more normal ranges, 600-pound tuna eight to ten feet in length are not extraordinary, and a 250- to 300-pound fish five or six feet in length is the commercial standard.

Bluefin tuna are classified as a "highly migratory species." That is, these are fish that swim across multiple national boundaries, which therefore requires states to enter into elaborate international agreements to regulate the fishery.

In New England, the tuna season runs from roughly July to September, corresponding to the bluefin's southward migration from waters near Newfoundland, where they have fattened up for the winter in southern waters. Fishers off the Canadian Maritimes, in the Gulf of Maine, and off Cape Cod intercept bluefin at their peak of fatness, and thus what Japanese buyers call "Boston bluefin" command the highest prices. Because of the enormous Japanese demand for this species (a demand that persists despite Japan's economic downturns of the past decade) and the concentration of this demand-through Canadian and New England fishers operating in a narrow ecological and temporal window to harvest from a small (probably diminishing) population of bluefin in the Northwest Atlantic—many environmentalists argue that bluefin tuna populations have been vastly over-exploited and that the species may not survive much longer as a commercial one (e.g., Kemf et al. 1996; Safina 1993, 1995).

The Atlantic bluefin tuna fishery has been almost exclusively focused on Japanese consumption, and indeed, until the 1970s when Japanese markets were accessible to North American producers, there was no commercial fishery for Atlantic bluefin in North American waters; bluefin were trophy fish or by-catches (Figure 1). The advent of the jumbo jet, capable of flying non-stop from the North American Atlantic coast to Japan carrying heavy cargo, created the possibility of shipping fresh fish from one ocean to another. Today, Japan is the world's primary market for fresh tuna for sushi and sashimi; demand in other countries is largely a byproduct of Japanese influence and the creation of new markets by domestic producers looking to expand their sales at home.

In addition to jet cargo service, several other factors prompted the globalization of tuna supply. In Japan during



Figure 1. Trophy for Sale: Selling a 600-pound bluefin on a Massachusetts dock.

the 1960s, the development of highly efficient commercial refrigeration and the expansion of high-speed trucking throughout Japan brought almost the entire country within one day's driving time from Tokyo, which enabled major urban markets like Tsukiji to command the best-quality domestic seafood. The impact on consumer tastes was profound. Old-fashioned specialties of pre-refrigeration days, such as tuna pickled in soy sauce or heavily salted, gave way to preferences for simple, unadorned, but absolutely fresh fish. The massive pollution and overfishing of Japanese waters during the high-speed growth decades of the 1950s and 1960s had depleted local production, and just as demand for fresh fish began to rise, jumbo jets brought New England tuna into reach.

Also, in the 1970s the expansion of 200-mile fishing limits around the world excluded foreign fleets from the coastal fishing grounds of many nations. Japanese distant water fleets, including many that pursued tuna, were forced out of prime fishing waters. International environmental campaigns brought fishing to the forefront of global attention, and the fishing industries in many countries, Japan among them, began to scale back their distant water fleets, seeing reliance on local fishing industries as a perhaps lower-profile, less economically risky means of harvesting seafood. With Japanese fishing operations beginning to be downsized and the country's yen for sushi still growing, the Japanese seafood industry turned more and more to foreign suppliers in the 1970s and 1980s.

During the 1980s, Japan's consumer economy—a byproduct of the now disparaged "bubble" years—went into hyperdrive. The tuna business boomed. Japanese imports of fresh bluefin tuna worldwide increased from 957 metric tons (531 from the United States) in 1984 to 5,235 metric

tons (857 from the United States) in 1993 (Sonu 1994). The average wholesale price peaked in 1990 at 4,900 yen per kilogram, bones and all, which trimmed out to approximately US\$34 wholesale per edible pound. (Roughly 50% of the gross weight of a tuna is lost during trimming, so the effective wholesale price per edible kilogram is approximately twice the auction price. By the time tuna reaches a restaurant's menu or a consumer's kitchen, the various margins and mark-ups generally double this price again.)

Not surprisingly, this Japanese demand for prime bluefin tuna created a gold-rush mentality on fishing grounds across the globe wherever bluefin tuna could be found. Rising yen prices were magnified by fluctuating exchange rates that created added bonanzas for foreign producers. For example, between 1975 and the peak in 1990, the wholesale price in yen rose 327%, but with foreign exchange rate shifts, the price in dollars rose a staggering 671%, and even though the yen price plunged by 43% between 1990 and 1995, the dollar price declined only 8%.

In the 1990s, as the U.S. bluefin industry was taking off and was riding a favorable combination of prices and exchange rates, the Japanese economy went into a stall, then a slump, then a dive. U.S. producers were vulnerable as their sole market collapsed. Fortunately for them, alternate domestic markets were growing, fueled by, and in turn further fueling, the North American sushi craze. An industry built around Japanese tastes survived with American customers when Japanese buyers retreated in economic disarray.

Visible Hands

A 40-minute drive from Bath, down a winding two-lane highway, the last mile on dirt road, the ramshackle wooden fish pier at West Point stands beside an empty parking lot. At 6:00 p.m. on a clear August day, nothing much is happening. In a huge tub of ice on the loading dock, three bluefin tuna caught earlier in the day also wait. Between 6:45 and 7:00, the parking lot suddenly fills up with cars and trucks with license plates from New Jersey, New York, Massachusetts, New Hampshire, and Maine. Twenty tuna buyers clamber out—half of them Japanese. The three bluefin tuna—ranging from 270 to 610 pounds—are winched out of the tub, and the buyers swarm around them, extracting tiny core samples to examine the color, fingering the flesh to assess the fat content, sizing up the curve of the body to guess what the inside of each fish would look like when cut open, and checking carefully the condition of the bodies for damage from harpoons or careless handling. They pay little attention to the fishing crews, except to ask a few pointed questions about where, when, and how each fish was caught and handled.

Dozens of onlookers—many of them "summer folk"—watch the whole scene, some of them with video cameras.

After about 20 minutes of contemplative milling, many of the buyers return to their trucks to call Tokyo by cellular telephone to get the morning's prices—the Tsukiji market has just concluded its tuna auctions for the day. The buyers look over the tuna one last time and give written bids to the dock manager, who then passes the top bid on to the crews of the three boats that landed them. Each bid is anxiously examined by a cluster of young men, some with a father or uncle looking on to give advice, others with a young woman and a couple of toddlers trying to see Daddy's fish. Fragments of concern float above the parking lot: "That's all?" "We'd do better if we shipped it ourselves!" "Yeah, but my pickup needs a new transmission now!"

No one knows what prices are offered because the auction bids are secret; only the dock manager knows the spread. After a few minutes, the crews all come to terms with the deals offered them. Someone poses a crew member for one last snapshot next to the fish that made the mortgage payments. The buyers shake hands. The fish are quickly loaded onto the backs of trucks in crates of crushed ice, known in the trade as "tuna coffins." As rapidly as they arrived, the flotilla of buyers sails out of the parking lot—three bound for JFK where the tuna will be airfreighted to Tokyo for sale the next day, the others looking for another tuna to buy—leaving behind three Maine fishing crews maybe \$14,000 richer.

Scapes and Chains

Appadurai's emphasis is on the fluid nature of motion along each dimension in his global flows of conjuncture, focusing on the visual imagery of "-scapes." His terminology reminds us—just as a landscape embodies a particularly situated point of view—that people experience global processes in particular locations, from which they derive their understanding and definition of the (global-yet-seemingly-local) processes themselves. People perceive their positions in global processes from partial and inherently local—inherently cultural—points of view. As often as not, interactions with global forces are plotted against constellations of local circumstance, fragmentary to an outside observer but forming a coherent, fixed view—a "scape"—to a local.

Appadurai's approach is abstract, but concrete examples of the kinds of global linkages he looks toward are easy to find (perhaps, in this context, as "tradescapes" and "culinascapes"). From a structural perspective, the global trade in seafood products can be seen as a complex network of "commodity chains" (Gereffi and Korzeniewicz 1994). Their analysis (directly drawing on the "world systems" approach of Immanuel Wallerstein) often focuses on the production of manufactured goods through the coordinated activities of far-flung components of the so-called "global factory." It examines the international division of labor into specialized realms that are integrated or coupled in

multiply contingent ways, rather than by executive fiat or managerial omniscience. The structure of a commodity chain—the links, stages, phases, and hands through which a product passes as it is transformed, combined, fabricated, and distributed between ultimate producers and ultimate consumers—is a highly fragmentary and idiosyncratic social formation, itself the product of the often minutely calibrated linkages, the provisioning relationships, that exist between every pair of hands along the way.

Commodity chains are often discussed in terms of widely dispersed industrial production characteristic of contemporary transnational trade. But the concept is equally useful for understanding the fluidity of other kinds of global production and distribution, including the social roles of small-scale entrepreneurship (Dannhaeuser 1989) and the global distribution of agricultural commodities (Alvarez 1994, 1999, 2001; Goldfrank 1994). And although commodity chains are often examined in economic and trade terms—Dannhaeuser, for example, writes about "channel domination" as the power held by key actors or institutions to define the basic terms of trade (1989)—one can also see domination of commodity chains in terms of the exploitation, deployment, or negotiation of cultural meanings and influences connected to commodity flows. In the cases that Alvarez examines, the cultural power is held by producers, whose influence thus extends throughout the commodity chains to distant urban markets. In the case of Atlantic bluefin tuna, the dominant cultural power extends outward from a uniform market core to diverse production peripheries, but the accommodations of core and local systems of economic and cultural production are locally specific.

Tuna Ranchers of Trafalgar

Two miles off the beach at Barbate, a huge maze of nets snakes several miles out into Spanish waters on the Atlantic approaches to the Straits of Gibraltar. A high-speed workboat (imported from Japan) heads out to the nets. On board are five Spanish hands, a Japanese supervisor, 2500 kilograms of frozen herring and mackerel from Norway and Holland, and two American researchers. The headlands of Morocco are a hazy purple in the distance, and just off Barbate's white cliffs to the northwest the light at the Cape of Trafalgar blinks on and off. For twenty minutes, the men toss herring and mackerel over the gunwales of the workboat while tuna the size (and speed) of motorcycles dash under the boat, barely visible until with a flash of silver and blue they wheel around to snatch a drifting morsel.

The nets, lines, and buoys are part of an almadraba, a huge fish trap or weir. The almadraba consists of miles of set nets anchored to the channel floor and suspended from thousands of buoys, all laid out to cut across the migration routes of bluefin tuna into and out of the Straits. This almadraba is put in place for about six weeks in June and

July to intercept tuna leaving the Mediterranean, after the spawning season is over. Those tuna who lose themselves in the maze end up in a huge pen, with a surface area roughly the size of a football field. By the end of the tuna run through the Straits, about 200 tuna are in the pen. For the next six months, they are fed twice a day, their nets tended by teams of scuba divers and watched over by guard boats sent out by the owner of the almadraba, the venerable patron of Barbate harbor, who has entered into a joint venture with a small Japanese fishing company. In November and December—after the season in New England and Canada is well over—the tuna are harvested and shipped by air to Tokyo in time for the end-of-the-year spike in seafood consumption.

Two hundred fish may not sound like a lot, but if the fish survive, if the fish hit their target weights, if the fish hit the market at the target price, these two hundred tuna are worth \$1.6 million dollars. Cold, wet cash. Liquid assets.

The pens-feed-lots for tuna-are relatively new, but almadraba are not, and these waters have been transnational since time immemorial, since before there was nation. A couple of miles down the coast from Barbate is the evocatively named settlement of Zahara de la Atunes-Zahara of the Tuna-where Cervantes lived for two years in the late sixteenth century. The centerpiece of the village is a huge stone compound that housed the men and nets of Zahara's almadraba in Cervantes' day, when the port was only a seasonally occupied tuna outpost. Today, the crumbling remains enclose a parking lot, an outdoor cinema, and several ramshackle cafés that cater to Zahara's contemporary seasonal visitors: Euro-kids in dreadlocks who come to Zahara for the windsurfing and the Moroccan hashish. Up the coast beyond Cádiz, reputed to be Europe's oldest city, archaeological remains of a 2,000year-old Phoenician site near the NATO base at Rota reveal tuna traps similar to those Cervantes observed and which the patron of Barbate still deploys when the tuna

In Barbate and the two other towns along the Costa de Luz that still have almadraba, small-scale Japanese fishing firms work with local fishing bosses who supply the customary fishing rights, the nets, the workers, the boats, and the locally embedded cultural capital to make the almadraba work.

Inside the Straits of Gibraltar, off the coast of Cartagena, another series of tuna farms operates under entirely different auspices, utilizing neither local skills nor traditional technology. The Cartagena farms rely on French purse seiners to tow captured tuna to their pens, where highly capitalized joint ventures between major Japanese trading firms and large-scale Spanish fishing companies have set up farms using the latest in Japanese net technology.

Elsewhere in the Mediterranean, other competitors also rely on the high-tech, high-capital route to farming. In the Adriatic, for example, Croatia is emerging as a formidable tuna producer. In Croatia's case, the technology and the capital were transplanted to the Adriatic by émigré Croatians who returned to the country from Australia after Croatia achieved independence from Yugoslavia. Australia, for its part, has developed a major aquacultural industry for Southern bluefin, a species closely related to the Atlantic bluefin of the North Atlantic and Mediterranean, and almost equally desired in Japanese markets.

The Multi-Sited Ethnography of Things

Unlike the kinds of top-down, unidimensional, and often unidirectional models inherent in some political-economy approaches to understanding transnational influence—what James Scott has referred to as the "thin formalizations" of "high altitude, low oxygen theory" —Appadurai's perspective suggests ways in which processes of transnational linkage between any given societies may proceed simultaneously along different dimensions, at different rates, in different directions, and to different ends. Anthropologists have embraced the concept of globalization as a rubric for much work in recent years. Appadurai suggests, and other theorists like George Marcus (1998) declare, that multi-sited ethnography is (or should be) the sine qua non of present and future anthropology.

The goal of multi-sited ethnography is a laudable one, but often it seems to be honored more in the breach than the observance. The framework as a whole often fails to provide a unifying theme—a phenomenological reality—that justifies the juxtapositions of scenes and settings.

Notable exceptions abound, and many of them revolve around the circulation of commodities. Sidney Mintz's analysis of sugar—Sweetness and Power—places the commodity at the intersection of imperialism, Caribbean slave plantation economies, and Western European industrialization (Mintz 1985). In a related vein, William Roseberry's analysis of the political economy of "yuppie coffee" in North America examines the coffee trade between South and North America as it is shaped by the growth of North American hyper-consumerism and the skillful marketing efforts of companies like Starbucks, thereby shaping new structural linkages between producer and consumer societies, and producing and reproducing new systems of cultural symbolism and identity through consumption practices (Roseberry 1996). Walter LaFeber's recent book Michael Jordan and the New Global Capitalism (1999), which examines the basketball star, Nike shoes, the NBA, and the globalization of popular culture, is another example of a phenomenologically focused analysis, although not an ethnographic one. William Mazzarella's study (1999) of Indian advertising in a global environment—advertising global commodities even as advertising itself is a commodity of global trade—is yet another example. And, studies of McDonald's adaptations to various East Asian local cultural and social contexts of consumption, by James Watson and others (Watson 1997), also put transnational data into phenomenologically coherent frameworks.

In his call for multi-sited ethnography, Marcus classifies these sorts of studies as examples of "follow the thing" anthropology, which he regards as a conventional extension of Wallersteinian approaches to the political economy of world systems. This, in contrast to "follow the people," "follow the metaphor," "follow the plot," "follow the life," or "follow the conflict" (Marcus 1998:89–95), is clearly suggestive of Appadurai's "scapes."

Appadurai's framework for studying commodities, developed in *The Social Life of Things* (Appadurai 1986), nicely complicates a Wallersteinian world, as Marcus also suggests. In that volume, for example, Igor Kopytoff outlines the study of the "cultural biography of things"—narratives of the "careers" or "life trajectories" of objects within the social contexts of their production, exchange, and ultimate consumption. He writes:

For the economist, commodities simply are. . . . From a cultural perspective, the production of commodities is also a cultural and cognitive process: commodities must be not only produced materially as things, but also culturally marked as being a certain kind of thing. [Kopytoff 1986:64 (emphasis added)]

James Clifford's essay, "Fort Ross Meditations" (1997), embodies something of this approach, one that also revolves around global markets and commodity flows, as well as the place of *place* in these flows. Clifford is conceptual and historical, rather than ethnographic (at least in a traditional sense); he provocatively envisions the West Coast of North America as the Eastern shore of an Asian sphere, first brought into being by Chinese demand for sea otter pelts, met initially by the outposts of a Russian empire, supplanted by American and British-Canadian empires propelled westward to the Eastern shore by many of the same Asian-generated market opportunities.

Clifford's vision brings to light another crucial point, implicitly echoing the criticism of globalization theory made by Harumi Befu (n.d.), who argues that all too often analyses of globalization start from the presumption that core-periphery relationships necessarily involve Western metropoles operating on non-Western peripheries. Befu points out, and Appadurai's model implicitly recognizes, that in a world of fast-moving "scapes," the fixity of the Western "core" may be illusion, with global processes radically redefining Western regions as peripheral to other cores along diverse dimensions of influence and interaction.

Global Sushi

On Palo Alto's University Avenue, a block from Stanford University's imposing main gate, the sushi bar Miyake is crowded on the weekend before winter term begins

in January 1997. Half a dozen sushi chefs are rolling out makizushi for another half-dozen waiters who are scurrying around the large restaurant, converted from a furniture or clothing store. A sign on the wall warns that occupancy by over 99 people is prohibited by the fire marshal, but twice that number are packed in. The menu has Silicon Valley attitude: alongside nouveau sushi standards like California Roll or New York Roll are items like Apple Roll, IBM Roll, and HP Roll. Another ordinary night at a Silicon Valley fraternity sushi bar.

Around the corner, Miyake's equally trendy but more upscale competitor, Higashi West, aptly trades on the selfconsciously cosmopolitan position of such watering holes and their clientele: Higashi means "East." Both Mivake and Higashi West mark the convergence of dot.com wealth (or aspirations for it) and new modes of consumption that highlight a generation's visions of cosmopolitanism. The Asian flavoring marks several transformations: the historical makeover of Santa Clara from the genteel suburbanity of the Peninsula's recent past to its present identity as ground zero of the frenzied Silicon Valley; the redefinition of tastes in sushi from connoisseurship pursued in the ambient authenticity of understated sushi bars, toward a consumption style with aggressive attitude in which sushi is simply one component of global popular culture; and both of these in turn signal the repositioning of the entire region around an emerging global map in which the Asian-Pacific zone may be the core, the Higashi West.

West Meets East

Global culture ebbs and flows in multiple directions and along different dimensions simultaneously. Even as the general economic relationship between Japan and the United States has become more complexly intertwined over the past couple of decades, trade issues and cultural interplay have been seen as somehow separate from one another. Typically, North Americans think that the primary direction of *cultural* influence is from West to East: James Dean, Corvettes, Harley-Davidsons, Anne of Green Gables, McDonald's, and Disneyland transported to Tokyo.⁵

At the same time, Japan has become increasingly central as a source for North American consumption and popular culture. From *Teahouse of the August Moon* to *Memoirs of a Geisha*; the transformation of *Seven Samurai* into *The Magnificent Seven*; Yoda's Zen foiling Darth Vader's armor; from the ateliers of Issey Miyake, Sony, and Nintendo, North American life is saturated with Japanese cultural motifs and material. Sushi is just one such influence flowing to the Eastern shore of the Asia/Pacific region.

I have briefly surveyed popular American magazines devoted to cuisine and travel since the 1920s for images of sushi. The earliest reference I have found is a 1929 article in *The Ladies' Home Journal* (Bassett 1929), which delicately skirts discussion of raw fish:

There have been purposely omitted from this discussion any recipes using the delicate and raw tuna fish which is sliced wafer thin and served iced with attractive garnishes. Thinking that [these] . . . might not sound so entirely delicious as they are in reality, no mention is made of them in the recipes. [p. 118]

Little mention of Japanese food appears again until well after World War II. In the early 1950s, the *New York Times* describes sushi defensively, as not much different from oysters on the half-shell. Through the 1960s, magazines like *Holiday* and *Sunset* discuss sushi in occasional articles that invariably provide recipes for cooked seafood. By the late 1970s, the tone has changed, with hip magazines titling articles "Desperately Seeking Sushi" and a *New York Times* article commenting on the opening of a sushi bar in the New York Harvard Club, underlining its emerging status as a marker of elite culture and consumption.

Largely held at arm's length by squeamish North Americans until the mid-1970s, sushi began to grow in popularity, coded as a signifier of class and educational standing. By now sushi has ambivalently entered the mainstreams of North American culinary iconography. In the early 1990s, when baseball stadia in California began to sell sushi along with hot dogs and nacho platters, sports commentators sputtered about the sanctity of the great American pastime. During the 1992 U.S. presidential campaign, a political cartoon published in the New York Times lampooned the contradictory images of Clinton and Gore as yuppies trying to hang on to their rural good-old-boy roots with a scene of the two of them sitting on the porch of an old-fashioned country store decked out with signs advertising Pennzoil and Perrier, Southern Comfort and sushi. Clinton went on, during the Tokyo G-7 summit, to solidify a major economic agreement with then Prime Minister Miyazawa during a much publicized, private dinner in an exclusive Ginza sushi bar, probably the first U.S. president to enjoy sushi-and Big Macs-with such visible relish.

Recently sushi has become high fashion: North American cosmetics advertisements promote deep red lip gloss—the color of tuna—as *sushi*, and green nail polish as *wasabi* (horseradish).

In the past two decades, Japanese food has become an inspiration for nouvelle cuisine (see Tobin 1992). Wasabi mashed potatoes, sushi ginger relish, and seared sashimi grade tuna steaks have become commonplace in upscale restaurants in North America and Europe. At a coffee shop in Cambridge, Massachusetts, a painted window sign advertises "espresso, cappuccino, carrot juice, lasagna, and sushi." At the same time, sushi has moved down-market as well. Supermarkets, even in remote places like Ithaca, New York, now provide take-out sushi box lunches made on the spot by employees wearing hachimaki (headbands) and happi coats.

At the Boston International Seafood Show—the world's largest trade show for seafood products—tucked in between booths pitching Nova Scotia smoked salmon, individual portion-controlled servings of crawfish étouffée, Nile Perch from Lake Victoria, and farm-raised shrimp from Latin America, a Japanese manufacturer displays its newest model Sushi Robot, capable of turning out perfectly formed rolls of makizushi, made with their trademarked "Sushi sticks." Franchising agreements are available, and the importers clearly hope that mechanical sushi makers will add a new twist to North American industrialized fast food (cf. Goody 1982 on industrial food).

Sushi and other elements of Japanese cuisine have become increasingly mainstream in North America-important components of the Asian-influenced mediascapes and ideoscapes of North American life. At the same time, some segments of the North American maritime economy have become increasingly drawn into the orbit of the Japanese fishing industry. I do not mean to propose a direct cause and effect relationship, but rather to suggest that global circuits of capital—both productive and symbolic—are being rewired, just as in the case of yuppie coffee that Roseberry (1996) writes about. Ideational production and economic production intersect and intermingle in this domain as in so many others. Cultural familiarity in one realm—the mainstreaming of sushi as part of North American culinary iconography—helps to enable and is in turn sustained by familiarity of another sort, in another realm, the economic integration of North American maritime life into Asiancentered trade networks and Asian markets, periphery to the Tokyo-Osaka metropolitan core.

This integration takes many forms. Asian fish buyers operate in many North American ports, and the Japanese market looms large for many fisheries. Japanese traders have also cultivated domestic American markets for lesser grades of the same fish they export to Japan. One large concern, based in Miami with a strong presence in Gloucester as well, is a company reputedly owned by the Unification Church, which is also the reputed backer of a loose chain of sushi restaurants across North America also owned and staffed by the Unification Church. A few premium Japanese restaurants in the U.S. receive imports of fresh fish from Japan; a tiny fraction of this seafood itself originates in North American waters, is quickly exported to Japanese markets, and is sold to brokers at Tsukiji who specialize in top-of-the-line exports, who immediately ship it back to North America, in an elaborate circulation of the cultural capital of Japanese markets, which validates the economic value of North American consumption.

The Market at the Center of the World

Commodity and cultural capital intersect at a central node in the global trade in seafood: Tsukiji, Tokyo's massive wholesale market for fresh, frozen, and processed seafood,

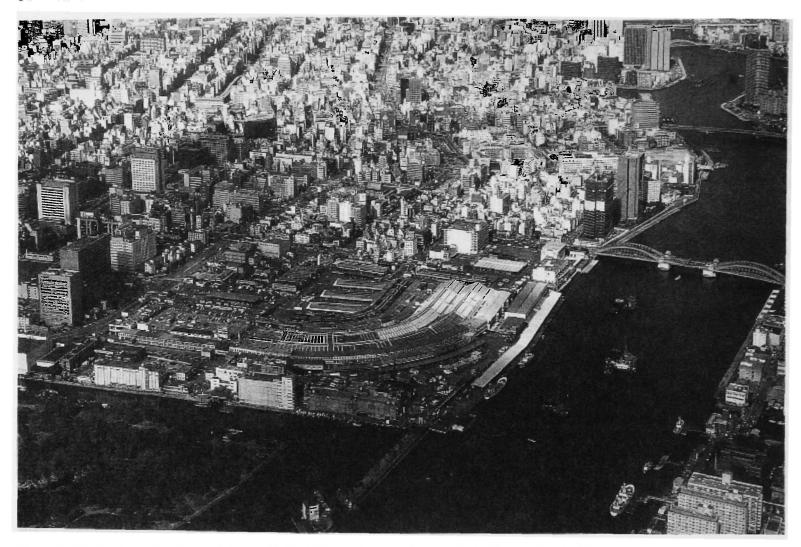


Figure 2. The Market at the Center of the World: Tsukiji's auction sheds hemmed in by Tokyo office buildings.

where I have been doing research since 1989.6 This is a marketplace where 60,000 traders come each day to buy and sell seafood for Tokyo's 22 million mouths, where every day over 2.4 million kilograms of seafood changes hands, where individual tuna from Massachusetts may sell for over \$30,000 apiece, and where octopus from Senegal, eel from Guangzhou, crab from Sakhalin, salmon from British Columbia and Hokkaido, snapper from Kyushu, and abalone from California are all in a day's trade (Figure 2).

Along Tsukiji's wharf, tuna are auctioned fish by fish, sometimes reaching prices in the tens of thousands of dollars. (Last time I checked the record price was over \$200,000 for a particularly spectacular tuna from Turkey.) The long rows of fresh tuna stretch for meter after meter. They are sold at "moving auction"—the auctioneer, flanked by assistants who record prices and fill out invoice slips at lightning speed, strides across the floor just above the rows of tuna, moving quickly from one footstool to the next without missing a beat, or a bid. The cluster of buyers moves alongside. They know a lot about fish, of course, and they know a lot about the techniques, the fishing communities, and the places where tuna are caught. They are

alert to fish from particular harbors or particular producers. They are equally alert to the desires of their customers: sushi chefs, restaurateurs, and up-scale fishmongers. In half an hour, tuna from around the globe—several hundred of them, some days, two thousand of them—are sold; faxes of prices realized are speeding to distant ports, and buyers are on their cell phones calling up chefs to tell them what they've got!

Boosters encourage the homey view that Tsukiji is *Tōkyō no daidokoro*—Tokyo's pantry—but it is a pantry where in 1995 almost \$6 billion worth of fish changed hands. (By way of comparison, New York's Fulton Fish Market, the largest market in North America, handled only about \$1 billion worth, and only about 13% of the tonnage of Tsukiji's seafood.)⁷

Tsukiji stands at the center of a technologically sophisticated, multi-billion-dollar international fishing industry, and every day the market's auctions match international supply with the traditional demands of Japanese cuisine, made ever-more elaborate by Japan's prosperity and what I call the "gentrification of culinary tastes."

Today, the stale joke among Tsukiji traders is that Japan's leading fishing port is Tokyo's Narita International

Airport; indeed in terms of the value of seafood landed, Narita does far surpass all of Japan's more conventionally watery fishing ports. In this sense, Tsukiji is a command post for the global seafood trade. To explain the inner workings of Tsukiji would require another paper—indeed an entire book (Bestor, in press[a])—so I skip lightly over the market here, making only four main points. (1) First, and most obviously, Tsukiji sets prices. In a half hour of bidding, the auctions unmistakably set global values. (2) The auction system and the "commodity chains" that flow into and out of the market are elaborate institutions that socially construct integration across levels within the market, and between the market and producers worldwide. (3) The flow of information that goes through the marketplace is a vital resource in structuring these forms of integration. Markets may make prices, but they run on information. Tsukiji is no exception. (4) Finally, Tsukiji creates and deploys enormous amounts of cultural capital, evident in its control of information, its enormous role in orchestrating and responding to the formation of Japanese culinary taste (and all the aspects of cultural legitimacy and authenticity that implies), and its almost hegemonic definitions of supply and demand and unassailable privileges to impose its own criteria of distinction, its own elaborate hierarchies of taste, which producers worldwide cannot ignore.

To return to Kopytoff's "biographical" metaphor, Tsukiji is the central chapter in the biography of a tuna. Let me try to illustrate what some of the themes in this biography are.

In the construction of Japanese cuisine as national identity—perhaps one should think of "imagined cuisines" as well as "imagined communities"—sushi looms enormously large. Not surprisingly, however, sushi as we know it today is of relatively recent origins.

The standard contemporary form of sushi, a thin slice of fish or shellfish atop a compact oblong block of vinegared rice—the style of sushi characteristic of Tokyo's cuisine and now the world's de facto sushi standard—was actually an innovation of the mid-nineteenth century. The particular style called *nigiri-zushi* ("squeezed" or "hand-molded" sushi) was developed only in the 1820s or 1830s (Ōmae and Tachibana 1981:105; Yoshino 1986:16).

One common story of nigiri-zushi's origins puts it in the hands of a famed sushi chef, Hanaya Yohei (1799–1858), who invented or perfected the technique in 1824.

One popular verse of the time celebrated the shop:

Crowded together, weary with waiting Customers squeeze their hands As Yohei squeezes sushi

Nigiri-zushi was street-food, casual fast-food. In keeping with the bustling street life of the commoners of Tokugawa Edo, sushi was sold on street-corners from stalls and carts: snack food.

Many of the present varieties of nigiri-zushi made with extremely fresh seafood were not even possible until the advent of mechanical refrigeration in the mid-twentieth century. Tastes in toppings have changed dramatically, as well: until about a generation ago, toro—the fatty flesh from tuna bellies that is now the quintessential high-priced sushi topping—was held in such low regard that it was given away as cat food (Omae and Tachibana 1981:12, 104-105; Watanabe 1991:26). To appreciate fully what a lowly status this implied for toro, one must know that the Japanese "cultural biography" of cats casts them not as adorable house pets, but as necessary domestic nuisances, useful for catching rats but otherwise pests themselves (cf. R. J. Smith 1992:23-24). Worse yet for toro's status, even at Tsukiji until the 1950s, toro was referred to as "fish that even a cat would disdain" (neko-matagi) (Watanabe 1991:26).

Since the 1960s and 1970s, however, for reasons I have outlined earlier, tuna has reigned supreme at Tsukiji. During the booming 1980s, a single prime fish might sell for \$30,000, \$50,000, even occasionally \$90,000. From time to time, even during recent economic doldrums, occasional, spectacular auction prices would electrify the market. On January 5, 2001, the first day of auctions of the new millennium, a Tsukiji trader made global news for his purchase of a 202 kilogram bluefin tuna (caught in northern Japan) for 100,000 yen per kilogram, (roughly \$840 per kilogram, or about \$170,000 for one fish, at the then prevailing exchange rate). This price doubled the previous auction record. Although widely regarded as a publicity stunt, the purchase nonetheless was for some Japanese a comforting, for others a disturbing, reminder of freewheeling consumption during Japan's boom times.

Stateless Fish

From a spartan suite of offices in an apartment complex in Madrid's suburbs, the headquarters staff of the International Commission for the Conservation of Atlantic Tuna (ICCAT, or "eye-cat" in the trade) administer an international regulatory regime that controls fishing for "tuna and tuna-like species" (which include swordfish) throughout the Atlantic north of the equator and in the Mediterranean. Established by treaty in the late 1960s, ICCAT imposes fishing quotas and other regulations on its member nations and territories, based on the scientific recommendations of fisheries population biologists, filtered through the political lenses of the sovereign states that form ICCAT.

ICCAT currently has 28 members including Atlantic and Mediterranean fishing countries (ranging from the U.S., Canada, and the European Commission, to Croatia, Sao Tome e Principe, and St. Pierre et Miquelon) as well as three global fishing powers: Korea (ROK), China (PRC), and Japan. ICCAT assigns quotas and directs catch reporting, trade monitoring, and population assessments. Allocations of quotas within a nation's fishing industry, licensing,

and enforcement of regulations are in the hands of the states and territories that belong to ICCAT. In the United States, the bluefin quotas are administered and the fishery is regulated by the National Marine Fisheries Service (NMFS, "nymphs").

Fisheries specialists classify bluefin tuna as a "highly migratory species." They are fast fish and have been clocked at speeds of 50 to 60 miles per hour. Bluefin are capable of swimming across the Atlantic in two months. Along the coast of North America, bluefin tuna spawn in the Gulf of Mexico, migrate up the coast to Newfoundland, and then return in an annual cycle. Some may cross the Atlantic instead, but how many make the grand tour, no one knows. Though "highly migratory species" is thus an apt descriptive label, it is not only a statement about behavioral biology, it is a statement about politics. "Highly migratory species" are those that swim across multiple national jurisdictions. Thus, ICCAT's ultimate task is to impose political order on stateless fish.

Science, politics, regulation, and potential profit make for troubled waters. As the tuna business grows ever more lucrative, the threat of overfishing looms larger (or has come to pass) and the question of who profits from the roaring global tuna market centered on Tokyo makes for nasty battles among fishers, regulators, and conservationists. During the past decade and a half, conservation groups have criticized ICCAT for not acting more aggressively to prevent or reverse an apparent bluefin population decline in the Western Atlantic in the early 1980s. Some activists have campaigned to have bluefin tuna protected under the umbrella of the Convention on International Trade in Endangered Species (CITES), a powerful global treaty. Japan is the major commercial destination for bluefin tuna and it fiercely resists CITES listing for bluefin tuna. In the past several years, Japan and ICCAT have put in place new systems to track (and regulate) trade; "undocumented fish" from flag-of-convenience fishing fleets and countries that are non-compliant with ICCAT regulations are now legally banned from Japanese markets. So every Atlantic bluefin arriving in Japan must be tagged and its papers must be in order.

The fact these fish travel far and fast poses other problems, too; no one can say for certain whether there is one population or two, or more. A huge controversy revolves around the question of how many of these migrating fish cross the ocean and how many stay on one side or the other. ICCAT, the U.S. National Academy of Sciences (National Research Council 1994), the National Audubon Society, and industry groups pose somewhat different answers to this seemingly straightforward question. ICCAT, some biologists, and many conservationists take the position that the Western and Eastern Atlantic stocks of bluefin tuna are distinct breeding populations. Some biologists, the National Academy of Sciences, and almost all North

American fishers take the position that they are not distinct breeding populations.

Why does this matter? If Atlantic bluefin tuna comprise two (or more) breeding stocks, then conservation regulations can be applied differently on either side of the Atlantic. If they form a single stock, all tuna fishers should be subject to similar regulations. Since the mid-1970s, IC-CAT has held to the "two stock hypothesis" and has imposed stringent controls on North American catches. IC-CAT reacted to the apparently dramatic decline in bluefin catches off North America in the 1980s by imposing stringent quotas (administered by NMFS) on the largely artisanal fishing efforts of small-scale North American fishers. On the European side of the Atlantic however, industrial-strength fishing efforts continued or expanded under much less stringent quotas.

North American fishers, not surprisingly, point to the evidence of cross-Atlantic migration and genetic studies of intermingling to argue that if Western Atlantic stocks are dwindling or crashing, then Europeans also have a responsibility to make more strenuous efforts to conserve the Eastern Atlantic and Mediterranean stocks as well. And, they gripe that stiff U.S. regulations simply protect bluefin at Americans' expense, and ultimately fishers from other countries pocket Japanese yen.

Particularly galling from the North American point of view are aspects of Mediterranean food culture. For example, in Spain and Italy—sitting near the Mediterranean spawning grounds—dried tuna roe is an expensive delicacy, produced in large quantities. Each slab of tuna roe drying in a Spanish processor's warehouse represents hundreds of thousands of potential fingerlings. Equally annoying to North Americans is the French purse seiner effort targeted on the Mediterranean spawning grounds that, among other things, harvests the fish for the Cartagena tuna farms.

Discriminating Tastes

In the Japanese trade, the evaluation of seafood along several different but interrelated dimensions reveals a number of conceptual themes of seasonality, locale, purity, nature, and nationality.

Seasonality plays an important role in Japanese food culture in defining particular varieties not just by availability and quality but by their essential characteristics. That is, fish of the same species may be known by different names depending on the time of year they are caught, their size, their maturity, or the location in which they are caught (all of which may be closely interrelated criteria for distinction, of course). These fish are not interchangeable; to substitute meji (an immature tuna) for maguro (a mature tuna) would be to miss the point of the cuisine. Meji is neither more nor less delicious than maguro; these are distinct varieties of seafood, each with its own characteristic flavors and textures,

each with its own best methods for preparation and consumption, and each to be judged by its own standards of quality. Popular guides to sushi, for both consumer and professional alike, focus on the repertoire of sushi toppings (known by cognoscente as *tane* or *sushidane*); they list 70, 80, or 100 distinctive varieties and the seasons of the year (and the locations at which) they are at their peak of perfection.⁸

Along another dimension, people in the business evaluate seafood according to whether it is free-ranging or raised in captivity. Fish cultivation, or aquaculture, has been practiced for centuries in Japan, and in recent decades Japanese developments in aquacultural technology have been enormously successful, not only in Spain and for many species in addition to tuna. (Eel, shrimp, hamachi [yellowtail], and salmon are prime examples.) In recent decades, as a form of industrial food, cultivated fish have been particularly popular in the supermarket and mass-market restaurant industries, where demand for large quantities of highly standardized seafood available year-round is great. Tsukiji traders and their professional customers, like sushi chefs, draw an important conceptual distinction between "wild" or "natural" fish (that is, those hunted and caught by fishers operating in open waters) and cultivated fish. Tsukiji traders usually regard cultivated fish as inferior to their "wild" cousins, and all other things being equal, a wild fish (whether live, fresh, or frozen) will command a premium over its comparable cultivated cousin. The conceptual dimension of wild versus cultivated is linked to distinctions between pure and impure, and, as we shall see shortly, to domestic versus foreign.

Generally, cultivated fish are thought to suffer by comparison in terms of such things as fat content, firmness and tone of flesh, and flavor; all these are regarded as consequences of raising fish in captivity where they eat an unvarying diet of prepared feed and cannot range freely. Their image in the marketplace is also colored by fears of such things as the potential hazards posed by contaminated feeds, or the fact that much aquaculture takes place in coastal waters that, at least in popular thinking, are likely to be tainted by various forms of perhaps as yet undiscovered industrial pollution.

The typical shopper or restaurant guest, however, is unlikely to know much about aquaculture or be able to actually distinguish a cultivated from a wild fish. Under such conditions, the snob appeal of connoisseurship flourishes. Premier sushi bars and elite restaurants (ryōtei) that specialize in classical Japanese cuisine make a point of not serving cultivated seafood, and some will avoid serving even the "wild" versions of seafood that are widely available in cultivated form simply to underscore their elite menus. Cultivated seafood thus ends up in processing plants, supermarkets, and the kitchens of large restaurant chains.

Along still another dimension, foreign foodstuffs are often regarded as simply inferior; other things being equal, Tsukiji traders prefer domestically harvested or produced food items (known and labeled as *kokusan*) over imports. The preference for domestically produced foodstuffs may in part reflect fundamental Japanese parochialism—and the strong cultural meaning attached to locality and cuisine—but it also reflects issues of *kata*, idealized form, and the inability of foreign producers to live up to Japanese standards.

This ideal of perfect external form—kata—adds an extra dimension to assessing foodstuffs. The slightest blemish, the smallest imperfection, or the most trivial deviation from a foodstuff's idealized form can make a product—or entire shipment—languish unsold. That is, the outward form—the kata—of the product must be perfect, since imperfection outside may signal imperfection within, just as the Japanese etiquette of wrapping symbolically ensures both ritual and hygienic purity (Hendry 1990). The shape of the tuna, the patterns of striation in the flesh, the color of the meat: these are among the elements of the ideal kata for tuna.

Almost every Tsukiji dealer in imported fish has his favorite horror story about the improper handling of fish by foreign producers and brokers; in re-telling these tales, traders return again and again to issues of Japanese food preferences as they are made manifest through "Tsukiji specs," the demanding specifications that the Tsukiji auction houses expect suppliers to adhere to (and which foreign exporters often seem to ignore or dismiss, according to Tsukiji traders). Reassurances of safety and predictability are encoded in preferences for domestic products and in the reliance on kata—ideal form—as an index of both purity and culinary authenticity.

In the case of Atlantic bluefin, Japanese buyers laboriously instruct foreign fishers on the proper techniques for catching, handling, and packing tuna for export. Just as a fish must live up to its ideal kata, so too processing requires attention to the proper form. Special rice paper is sent from Japan for wrapping the fish before burying them in crushed ice. Despite the high shipping costs and the fact that 50% of the gross weight of a tuna is unusable, tuna is sent to Japan whole, not already sliced down into salable portions. Spoilage is one reason for this, but kata is another. Everyone in the trade agrees that Japanese workers are much more highly skilled in cutting and trimming tuna than Americans, and no one would want to risk sending botched up cuts to Japan.

Catch Giant Fish for Japan

It's a slow August day on the pier of the Cape Anne Fisheries Cooperative in Yankee City, Massachusetts. Only a few boats tie up to try to sell their day's catch—a single bluefin tuna per boat per day, all that the law allows.

The Cape Anne team consists of three men: Jack, the pier manager; Jimmy, his young assistant and negotiator; and Mitsu, a 21-year-old Japanese tuna technician sent by Cape Anne's Japanese partners to spend the season grading and buying tuna for shipment to Tokyo. When a boat ties up, Mitsu goes aboard to check out the condition of the fish. The best fishers have slit the belly, run cold water through it, and stored the fish in an insulated "tuna bag" to try to lower the temperature to avoid spoilage. The amateurs ignore all these standard techniques for properly handling a potentially valuable fish. Pro or amateur, many fishers arrive at the dock convinced this tuna, their tuna, is the prize of the day.

Mitsu's job puts him in direct confrontation with their expectations, their dreams. He takes the temperature of the fish, takes a core sample of flesh the width of a pencil from the midsection of the fish and examines it for discoloration, and cuts an inch-thick wedge from the base of the tuna's torso, just above the tail. The wedge looks rather like a half-round from a tree stump, and Mitsu checks it for the lines and whorls that tell him—like tree rings—the tuna's characteristics. It takes him about five minutes of silent concentration, before he clambers back up the deck and shows his findings to Jimmy and Jack. Together they consult in almost silent whispers, in a trade pidgin of Japanese fishing terms and English expletives, before they agree on a grade and an offering price.

Jimmy tells the anxiously waiting fisher the news. It's a case of good cop, bad cop. Mitsu never talks to the fishers himself. He's the youngest, most inexperienced guy on the dock, and his English is terrible, but even if it were fluent, he wouldn't talk to the fishers. They deal through Jimmy (who speaks less Japanese than Mitsu speaks English). Jimmy can play helpful ("I wish I could offer you a better price, man,") while nodding toward the silent and presumably hard-fisted Japanese buyer with the unspoken implication ("but, what the hell ya goin' do with these Japanese?"). The gambit usually works. Everyone on the dock "knows" that you can't understand the Japanese, and Jimmy and Mitsu's game plays directly into that set of assumptions.

A guy arrives with a lousy fish. Small boat, poor equipment, clearly not experienced. The fish itself is long, skinny, poor color, poor handling on board. Jimmy tells him it is only a "domestic" fish (i.e., it won't be sent to Japan but will be sold for the American tuna market). Three dollars a pound. The guy is dumbstruck. Anguish shows on his face, in his body language. He begs for a re-examination. He demands that he be shown other, better fish. Jack quickly demonstrates again how to read a tuna wedge. He explains all the signs that his really is a lousy fish. Jack explains the significance of color, the importance of a slippery but not rubbery feel, the signs of yake (scorching, caused by improper chilling of an overheated tuna) and yamai (cloudy discoloration, apparently caused by some

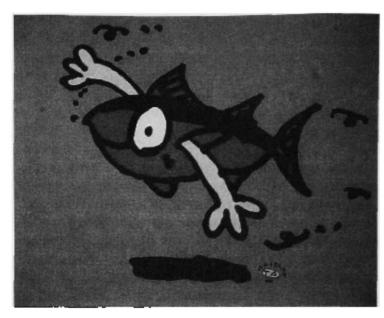


Figure 3. Goro-kun, the sporty spokestuna for the Japanese National Federation of Tuna Producers.

illness in the fish) in the meat: the importance of visual appeal.

The guy doesn't give up. This is his first tuna of the year, and the season is fast coming to an end. "You guys are all against me," he yells, "working with that damned Japanese trying to screw us." Finally, he turns to me, in desperation: "You've been in Japan, you know what a good fish looks like, look at this core, and tell these guys!"

The kings of this dock are harpooners—the guys who run so-called "stick boats." They never deign to haggle with Japanese tuna techs. Harpooners catch the best fish, take the most risks, and pioneered the use of spotter pilots to guide them to schools of tuna. Harpooners need a good eye and a strong arm to spear a tuna from a narrow bow sprit mounted on a turbo-charged fishing vessel. They are generally young, strong, articulate—many of them have B.A.s from famous New England colleges, Colby, Bowdoin, Harvard. They are fiercely independent and their territory runs from the Canadian line through the Gulf of Maine to roughly the BB buoy off Chatham on Cape Cod. The Stellwagen Bank across the mouth of Cape Cod Bay is a favorite and usually productive hunting ground.

They also have been the most aggressive in trying to shift the terms of trade out of the hands of Japanese and more into their own. Most of them are knowledgeable and experienced in consigning their fish directly to auction in Tokyo, bypassing the Japanese and American buyers on the docks. At Cape Anne, they definitely bypass Mitsu and Jimmy and watch with amused contempt as lesser fishers try to negotiate their ways into better deals. As the consignment segment of the trade has grown, the nature of information exchanges between Japanese auction houses and American fishers has improved, much more of the economic decision-making is in American hands, as are the potential profits and the clear and present risks. It is the

harpooners who largely have wrought these changes and reaped the benefits. Their successes reflect the constantly shifting balance of power—of cultural "channel domination"—within the tuna trade, producers on the periphery who have mastered enough of the workings of the distant market to generate their own understandings, removed from yet enmeshed in its social and cultural systems.

Commodity, Cultural Imagination, and Strategic Essentialism

Culture and language are strategic tools in this business, not always deployed to convey information or understanding but sometimes to obstruct its flow.

Tuna doesn't require much promotion among Japanese consumers, since it is consistently the most popular seafood and demand is high throughout the year. When the Japanese Federation of Tuna Producers (known as Nikkatsuren) runs ad campaigns for tuna, they tend to be low-key and whimsical, rather like the "Got Milk?" advertising in the United States. Recently, the federation launched "Tuna Day" (Maguro no hi), providing retailers with posters and cards for recipes more complicated than "slice and serve chilled." Tuna Day's mascot is Goro-kun, a colorful cartoon tuna swimming the Australian crawl (Figure 3). Despite the whimsical contemporary tone of the mascot, the date selected for Tuna Day carries much heavier freight. October 10, it turns out, commemorates the date that tuna first appears in Japanese literature, in the Man'yoshu, the eighth-century collection of court poetry—one of the towering classics of Japanese literature—in a poem dated the tenth day of the tenth month. An added twist is that October 10 today is a national holiday, Sports Day (itself a commemoration of the 1964 Tokyo Olympics), observed across the country with family athletics contests sponsored by companies, communities, and schools. Goro-kun, the sporty tuna, scores a promotional hat trick, suggesting intimate connections among national culture, healthy food for active lives, and a happy family meal.

The fact that tuna did not become a common part of the Japanese diet until a couple of hundred years ago, and that the present modes of consuming tuna are essentially twentieth-century developments, matters not a whit. Reference to the *Man'yoshu* establishes an impressive pedigree at the very core of Japanese civilization. Unassailable hierarchies of taste and distinction are erected through this device. If tuna = Japanese tradition, what then is the extra significance of *Japanese* tuna?

Against an eighth-century Japanese poem, what cultural resonances can foreign producers fall back on?

For the Spanish tuna farmers, there is the archaeological evidence of Phoenician fish weirs, the accounts of tuna harvests recorded by Pliny the Elder, and the writings of Cervantes. (Unfortunately, Cervantes noted that "one has

not met a true scoundrel until one has lived among the men of the almadraba at Zahara de la Atunes.")

What cultural capital can a New England fisher evoke?

Charlie, Star-Kist isn't looking for tuna with good taste! Star-Kist is looking for tuna that taste good!

Emiko Ohnuki-Tierney has written about Japanese and foreign attitudes toward raw seafood as one of the pillars of "authentic" Japanese cuisine. Inverting Lévi-Strauss's famous dichotomy, Ohnuki-Tierney (1990:206) observes:

For the Japanese raw or uncooked food is *food*, while in other cultures food usually means *cooked* food. The raw in Japanese culture thus represents culturalized nature; like a rock garden in which traces of [the] human hands that transformed nature into culturalized nature have been carefully erased, the raw food of the Japanese represents a highly crafted cultural artifact presented as natural food. [emphasis added]

None of the guys on the Cape Anne pier would say it so elegantly, but all would agree that cuisine is national essence and that *Japanese* cuisine is *natural* essence as well. All of them want to understand why fish that they regarded not so long ago as a sports fish with no commercial value—bluefin tuna used to go for a penny a pound for cat food, when any buyer could be found at all—has turned into treasure. As one guy on the dock put it, a tuna has become "my blue Toyota." They seek to explain the transformation from trash to treasure.

Sometimes they construct elaborate cultural rationales.

For some Americans the quick answer is simply national identity. The deep red of tuna served as sushi contrasts with the stark white rice, evoking the red-and-white of the Japanese national flag. Other fishers, a bit more sophisticated in cultural symbolism, also know that red-and-white is an auspicious color combination in Japanese ritual life (and they know that lobster tails are popular at Japanese weddings for just this reason).

Still other Americans favor a historical answer. For them the cultural prize is fighting spirit, pure machismo, both their own and the tuna's. The tuna they catch sometimes fight and fight and fight some more. Taken by rod and reel, a tuna may battle the fisher for four or five hours. Some tuna never give up. They literally fight to the death. So for some fishers, the meaning of tuna—the equation of tuna with Japanese identity—is simple.

Tuna is nothing less than the samurai fish!

Such local mystifications of the motivations of a distant market for the local commodity are not unique. They have been at the core of cargo cults and commodity fetishism throughout the anthropological literature, from New Guinea to Bolivia. In this instance, the ability of the fishers to imagine a Japanese culture and imagine the place of tuna within its demanding culinary culture is not just the product of a one-sided commodity exchange; it also reflects the rewired circuitry of global cultural affairs in which Japan is core and the Atlantic seaboard a distant periphery, acutely



Figure 4. "Bountiful Appetite": Flying tuna arriving at Kansai International Airport.

aware of but not terribly knowledgeable about the core that commands its markets.

Whether or not Japanese buyers and their knowing American colleagues actively encourage cultural and linguistic mystification—this "strategic essentialism"—is not the issue. They don't really have to. Japan is wired into the North American imagination as the inscrutable superpower, precise and delicate in its culinary tastes, feudal in its cultural symbolism, and insatiable in its appetites whether buying tuna or buying Rockefeller Center. The mediascapes and ideoscapes of contemporary North American life already provide the cultural material out of which fishers can construct their own Japan. Were Japan not a prominent player in so much of the daily life of North Americans, the fishers would have less to think with in constructing their Japan. As it is, they struggle with unfamiliar exchange rates for cultural capital that compounds in a foreign currency.

Viewing distant markets through a glass darkly serves the interests of Japanese buyers, who in very pragmatic terms recognize that markets are formed around flows of information; to the extent that market information is couched in the terms of cultural particularism, foreign producers who are willing to accept essentialist discourse as the way to understand others will be perpetually at a disadvantage. The essentialist monologue generated in the fishers' imaginary, sustained in part by the linguistic screen of non-communication between buyer and seller, serves nicely to obscure both the productive and the cultural processes involved in the trade.

This is precisely what the more successful American fishers resist. The harpooners in particular want no part of this mystified ideoscape; they avoid it through their active exploration and expansion of trade channels to Japanese markets that leave them in control of economic decision-making, even at the potential cost of greater market risk. It is through their efforts to establish direct sales to Japanese markets that new trade channels have opened up, even as

the economic downturns of Japan during the 1990s lowered the value of the tuna being exported.

Feeding Cities

Analyzing the emergence of another market center, Chicago in the nineteenth century, the environmental historian William Cronon, in his book *Nature's Metropolis* (1991), examined the reconfiguration of North American agricultural production as Chicago emerged simultaneously both as the transportation hub for the U.S. rail system and as the production and marketing center for packed meats. These developments not only established the primacy of Chicago's markets and brought vast areas of agricultural North America into direct economic dependence on Chicago but also redefined the consumption patterns of much of the North American public, with consequent realignments of local systems of production, consumption, and socioeconomic autonomy.

In the last decades of the twentieth century, a variety of technological advances—including highly efficient refrigeration and freezing technologies, the advent of global jet air cargo service, and the proliferation of decentralized telecommunications systems such as fax, cellular telephones, and the Internet—all contribute to a similar reconfiguration of the global fishing industry, with Tsukiji as one of its major hubs. If in the nineteenth century Chicago became Carl Sandburg's "hog butcher for the world," at the dawn of the twenty-first century Tsukiji has become fishmonger for the seven seas (Figure 4).

Sidney Mintz observes that "foods were until recently a function of time (and of space) in ways that, for much of humanity, they hardly are today" (1997:185, emphasis added). This is true for only one side of the trade (and only partly so). That is, for consumers, the effect of complex globalization of markets is to make seasonality transparent at least for the mundane foodstuffs of day-to-day life. On the other hand, in the context of globalization of markets, both season and place take on hyper-significance.

On this other side of the coin, production and distribution, foods are even more a function of time and space than in the past. Global food production and distribution revolves around complex coordination not only of singlestranded relationships between producers and markets (point to point) but of multi-lateral trade relationships.

A tuna harpooner in the Gulf of Maine has to worry about his own production in competition not only with other tuna harpooners in the Gulf of Maine, but also with other gear types operating in different waters and slightly different times up and down the coast, simultaneously in competition with the production schedules of Spanish almadraba, French purse seiners, Australian aquaculturalists, and Indonesian longliners in the Indian Ocean.

End of the Season

The tuna auction at the Hampshire Co-Op dock is about to begin on the second-to-the-last day of the 1999 season. The National Marine Fisheries Service has sent out faxes to all license holders and dealers, closing the quota the following day. NMFS calculates from daily catch reports that the season's catch is only a ton or two shy of the entire annual quota. Fishing will therefore stop.

The weather is stormy. Few boats are out. Only three fish, none of them terribly good, are up for sale today, and the half dozen buyers at the auction, three Americans and three Japanese, gloomily discuss the impending end of a lousy season.

In July, the bluefin market collapsed just as the American fishing season was starting. In a stunning miscalculation, Japanese purse seiners operating out of Kessennuma in Northern Japan managed to land the entire year's quota from that fishery in only three days. The oversupply sent tuna prices at Tsukiji through the floor, and they never really recovered during the rest of the American season.

Today, the news from Spain is not good. The day before, faxes and e-mails from Tokyo to the fish pier brought word that a Spanish fish farm had suffered a disaster. Odd tidal conditions near Cartagena led to a sudden and unexpected depletion of oxygen in the inlet where one of the great tuna nets is anchored, this one being part of a highly capitalized, high-tech joint venture between a major Japanese trading firm and a large-scale Spanish fishing company. Overnight, 800 fish suffocated in the oxygen-depleted water. Divers hauled the tuna out. The fish were quickly processed, several months before their expected prime, and were being shipped off to Tokyo, to salvage what could be saved from calamity. For the Japanese corporation and its Spanish partners, a harvest potentially worth \$6.5 million would yield only a tiny fraction of that.

The buyers at the morning's auctions did not rejoice in the misfortunes of their Spanish competitors, recognizing instead that they would suffer as well. Whatever the fish today and tomorrow might turn out to be, they would arrive at Tsukiji in the wake of an enormous glut of hastily exported Spanish tuna.

Thinking Global, Acting Urban

Ulf Hannerz makes the point that globalization, or "world culture [is] not a replication of uniformity but an organization of diversity, an increasing interconnectedness of varied local cultures" (1996:102).

The organization of diversity in this instance weaves together different modes of production in a complex temporal scheme. Here I have only briefly hinted at the varying modes of integration that this trade depends upon. Large multinational corporations with global cash flows and local fishing *patron* whose capital is locally embedded cultural

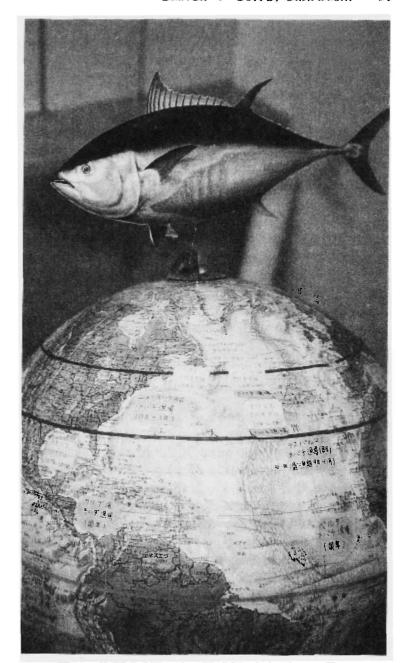


Figure 5. Global Tuna in a Tsukiji wholesaler's office.

capital work hand in glove. Marine foraging coexists with heavily capitalized aquaculture. These industrial fishing operations coordinate their production schedules not only with the Tokyo market's demand cycles but also with the seasonality of the fishing efforts of artisanal fishers in North America and elsewhere. Production for local consumption is interwoven into production for export (exports sometimes to replace fish elsewhere that are themselves destined for export)—so Spanish tuna ends up in U.S. supermarkets in place of American tuna that was exported to Japan, and some of the best American tuna comes back to the U.S., from Japan, "certified" by its quick circulation through the Tsukiji marketplace. (As the infant American bluefin fishing industry realized its total dependence on Japanese markets was at risk of collapsing when the Japanese economy went sour in the 1990s, alternate domestic markets were avidly sought throughout North America, fueled by and fueling the North American sushi boom, itself another product of the complex economic relationship between North America and East Asia, deeply embedded in the social stratification of elite and middle-class culture.)

The complex temporal structure of the trade requires coordination of producers and markets, supply and demand among many irreconcilable clocks. Timescapes, perhaps. There is natural time, somewhat beyond the ken of humans to accurately predict: the seasonal flows of fish, migrating, spawning, feeding, or just schooling. There is fishing time, as locals attempt to read natural time and code conditions that indicate this is the right time to fish. There is regulatory time, the managerial impulse to redefine natural time into fishing seasons so that fishing time corresponds to a bureaucratic rather than a natural cycle. And, there is market time, the temporal logic that coordinates far-flung activities carried out by disparate groups, using wildly different technologies, and engaged in incompatible modes of production, into a seemingly coherent and seamless master narrative of supply and demand.

Globalization links these timescapes together, not by forcing a uniform logic on each place but rather by filling in the gaps, coordinating activities at disparate locations, twisting perspectives on mosaic chips to make them appear to fit—not only organizing diversity, to echo Hannerz's phrase, but also acting as an arbitrageur, exploiting the minute differences in time and place in order to profit from the diversity it has exposed and then juxtaposed.

Just as Georg Simmel pointed out that the velocity of money and credit transform social relationships and the relationships attached to commodities, so, too, conditions of globalization transform relations among various parts of the globe and re-wire the circuits of capital flow in all its varied manifestations. Time and money—the velocity of capital—are not the only issues at stake. As I have tried to suggest, the transformations of meanings attached to relationships and to commodities are equally important for understanding the global role of markets, the cultural processes of markets and commodity chains, and the evershifting relationships between local actors and global stages.

All these phenomena take place through the interaction of market and place. It is through these interactions, perhaps re-arranged in time and space but not fundamentally altered, that communities—places—continue to encounter "the material and cultural means for their social reproduction," material and cultural means that in this example as in so many others may be new, alien, or transformed, but no less important for creating local meanings and local social conditions. It is in these interactions that one can find the local in the global (Figure 5).

The interactions of cultural meanings, economic processes, and social structural forms, along multiple dimensions, in diverse juxtapositions of local places, in accelerating time, accomplish the "organization of diversity" of

globalization, but they do so through substantially urban means: market, place, hierarchy, trade, and linkage. As Hannerz puts it "cities . . . are good to think with, as we try to grasp the networks of relationships which organize the global ecumene of today. They are places with especially intricate internal goings-on, and at the same time reach out widely into the world, and toward one another" (1996:13).

Notes

Acknowledgments. I conducted fieldwork at Tsukiji and other markets in Japan during: February-July 1989; January, July, and September-November 1990; May-June 1991; December-January 1991-92; May-June 1994; June-July 1995. Additional brief visits to Tokyo between July 1997 and July 1998 and in October 2000 also contributed ethnographic data. Research in New England and elsewhere in the U.S. was carried out during summers between 1992 and 1999. Research trips to Korean markets in 1995 and 1998; to Hong Kong, China, and Vietnam in 1998; and to Spain during July-August 1999 also provided valuable data on Japanese fishing interests in those nations.

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Readers interested in more detailed analyses of Tsukiji's current structure and history, as well as references to the extensive range of Japanese language publications on Tsukiji, food culture, and Tokyo's history, may wish to consult Bestor (1995, 1997, 1998, 1999a, 1999b, in press[a], in preparation[a], in preparation[b]).

1. Commodity chains are integrated social systems that connect production and consumption, often through many (loosely coupled) linkages and often across great social and geographical distance (Gereffi and Korzeniewicz 1994). Commodity chains are also known as commodity circuits (Leslie and Reimer 1999) or distribution channels (Dannhaeuser 1989).

- 2. The National Research Council (1994) provides a comprehensive overview of the population biology and genetics of tuna populations, focused primarily on Atlantic bluefin.
- 3. The average wholesale price per kilogram of tuna in Japan's six largest urban markets between 1975 and 1995 was as follows (figures in parentheses are dollar values calculated using the average exchange rate for that year): in 1975, the average auction price was ¥1510 (\$4.90) per kilogram; 1980, ¥2145 (\$8.86); 1985, ¥2827 (\$11.13); 1990, ¥4937 (\$32.91); and 1995, ¥2818 (\$30.30) (Japan, Japan Statistical Yearbook, 1988:196, 1991:198, 1995:270, 2000:262 and 422).
- 4. Scott's remarks were made during a presidential panel on the future of Asian studies at the annual meetings of the Association for Asian Studies, March 1997.
- 5. See, for example, Hopgood (1998) on Japanese fans of James Dean; Watson (1997) and Ohnuki-Tierney (1997) on McDonald's in East Asia and Japan in particular; Raz (1999) and Brannen (1992) on Tokyo's Disneyland. See also Tobin (ed.)(1992).
- 6. See Bestor 1995, 1997, 1998, 1999a, 1999b, 2000, and in press(a).
- 7. Figures are based on a New York City report that gives estimates for the Fulton Fish Market for the period from September 1, 1995, through August 31, 1996. Figures during this year, while the marketplace was under the direct supervision of an administration appointed by a federal judge in a racketeering case, offer a unique view of a market whose activities have otherwise been shrouded from detailed public scrutiny. During this time, shipments to Fulton were estimated to total 183 million pounds (roughly 83.2 million kilograms) valued at approximately \$1 billion (New York Times, November 11, 1996, p. B4).
- 8. Examples include Rakugo (1990), in a popular book on sushi, and Honda (1997), a restaurant guide, published in conjunction with a leading gourmet magazine.
- 9. Fish raised through aquaculture are referred to as "cultivated" or "cultured" (yōshoku), using the term also used to refer to cultured pearls or silkworm culture. In contrast, wild fish are referred to as "natural" (tennen, literally natural or spontaneous). In the trade, all fish are presumptively tennen unless otherwise stated, so yōshoku constitutes the linguistically marked category, the one that requires special comment or labeling.

References Cited

Acheson, James

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1985 Social Organization of the Maine Lobster Market. *In* Markets and Marketing. Monographs in Economic Anthropology, 4. Stuart Plattner, ed. Pp. 105–130. Lanham, MD: Society for Economic Anthropology.

Alvarez, Robert R., Jr.

- 1994 Changing Ideology in a Transnational Market: Chile and Chileros in Mexico and the U.S. Human Organization 53(3): 255–262.
- 1999 La Maroma, or Chile, Credit, and Chance: An Ethnographic Case of Global Finance and Middlemen Entrepreneurs. Human Organization 57(1):63–73.

2001 Beyond the Border: Nation-State Encroachment, NAFTA, and Offshore Control in the U.S.-Mexican Mango Industry. Human Organization 60(2):121–128.

Appadurai, Arjun

1990 Disjuncture and Difference in the Global Cultural Economy. Public Culture 2(2):1–24. (Reprinted in Appadurai 1996, Modernity at Large: Cultural Dimensions of Globalization. Minneapolis: University of Minnesota Press.)

Appadurai, Arjun, ed.

1986 The Social Life of Things: Commodities in Cultural Perspective. Cambridge: Cambridge University Press.

Bassett, Bernice Claire

1929 Entertaining in Japanese Style. The Ladies' Home Journal, September 1: 118, 137.

Befu, Harumi

N.d. Globalization of Japan: Its Implication for the Globalization Model. Kyoto Bunkyo University, unpublished MS.

Bestor, Theodore C.

1995 What Shape's Your Seafood In? Food Culture and Trade at the Tsukiji Market. American Seafood Institute Report. September.

1997 Visible Hands: Auctions and Institutional Integration in the Tsukiji Wholesale Fish Market, Tokyo. *In* Japanese Business: Critical Perspectives on Business and Management. Schon Beechler and Kristin Stucker, eds. Pp. 229–254. New York: Routledge.

1998 Making Things Clique: Cartels, Coalitions, and Institutional Structure in the Tsukiji Wholesale Seafood Market. In Networks, Markets, and the Pacific Rim: Studies in Strategy. Mark Fruin, ed. Pp. 154–180. New York: Oxford University Press.

1999a Wholesale Sushi: Culture and Commodity in Tokyo's Tsukiji Market. *In* Theorizing the City: The New Urban Anthropology Reader. Setha M. Low, ed. Pp. 201–242. New Brunswick, NJ: Rutgers University Press.

199b Constructing Sushi: Food Culture, Trade, and Commodification in a Japanese Market. *In* Lives in Motion. Susan O. Long, ed. Pp. 151–190. Ithaca, NY: Cornell East Asia Series.

2000 How Sushi Went Global. Foreign Policy, November-December:53-64.

In press(a) Tokyo's Marketplace: Culture and Trade in the Tsukiji Wholesale Market. Berkeley: University of California Press.

In press(b) Markets: Anthropological Perspectives. *In* International Encyclopedia of the Social and Behavioral Sciences. London: Elsevier Science.

In preparation(a) The Social Death of Things: Ritual and the Cultural Biography of Seafood. Article in preparation.

In preparation(b) Global Sushi: Commodity, Environment, and Consumption in the Transnational Tuna Trade. Book manuscript in preparation.

Bourdieu, Pierre

1984 Distinction: A Social Critique of the Judgement of Taste. Cambridge, MA: Harvard University Press.

Brannen, Mary Yoko

1992 "Bwana Mickey": Constructing Cultural Consumption at Tokyo Disneyland. In Re-Made in Japan: Everyday Life and Consumer Taste in a Changing Society. Joseph Tobin, ed. Pp. 216–234. New Haven, CT: Yale University Press.

Clark, Gracia

1994 Onions Are My Husband. Chicago: University of Chicago Press.

Clifford, James

1997 Routes: Travels and Translation in the Late Twentieth Century. Cambridge, MA: Harvard University Press.

Cohen, Abner

1969 Custom and Politics in Urban Africa. Berkeley: University of California Press.

Cronon, William

1991 Nature's Metropolis: Chicago and the Great West. New York; Norton.

Dannhaeuser, Norbert

1989 Marketing in Developing Urban Areas. *In* Economic Anthropology. S. Plattner, ed. Pp. 222–252. Stanford, CA: Stanford University Press.

Geertz, Clifford

1979 Suq: The Bazaar Economy of Sefrou. *In* Meaning and Order in Moroccan Society. C. Geertz, H. Geertz, and L. Rosen, eds. Pp. 123–314. New York: Cambridge University Press.

Gereffi, Gary, and Miguel Korzeniewicz, eds.

1994 Commodity Chains and Global Capitalism. Westport, CT: Praeger.

Goldfrank, Walter L.

1994 Fresh Demand: The Consumption of Chilean Produce in the United States. *In* Commodity Chains and Global Capitalism. Gary Gereffi and Miguel Korzeniewicz, eds. Pp. 267–279. Westport, CT: Praeger.

Goody, Jack

1982 Cooking, Cuisine and Class: A Study in Comparative Sociology. Cambridge: Cambridge University Press.

Hannerz, Ulf

1980 Exploring the City. New York: Columbia University Press.

[1993]1996 The Cultural Role of World Cities. *In* Transnational Connections. Pp. 127–139. London and New York: Routledge.

1996 Transnational Connections. London and New York: Routledge.

Hansen, Karen Tranberg, and Carter A. Roeber, eds.

1999 Rationale, Romance, and Third World Cities. Special Issue. City and Society 11(1–2).

Hendry, Joy

1990 Humidity, Hygiene, or Ritual Care: Some Thoughts on Wrapping as a Social Phenomenon. *In* Unwrapping Japan. Eyal Ben-Ari, Brian Moeran, and James Valentine, eds. Pp. 18–35. Manchester: Manchester University Press.

Honda, Yukiko

1997 Sushi Neta Zukan (The Illustrated Book of Sushi Toppings). Tokyo: Shogakkan.

Hopgood, James F.

1998 Another *Japanese Version*: An American Actor in Japanese Hands. *In* The Social Construction of Race and Ethnicity in the United States. Joan Ferrante and Prince Brown, Jr., eds. Pp. 470–477. New York: Longman.

Japan

1988–2000 Japan Statistical Yearbook. Tokyo: Office of the Prime Minister.

Kemf, Elizabeth, Michael Sutton, and Alison Wilson

1996 Wanted Alive: Marine Fishes in the Wild. Gland, Switzerland: WWF—World Wide Fund for Nature.

Kopytoff, Igor

1986 The Cultural Biography of Things: Commoditization as Process. *In* The Social Life of Things: Commodities in Cultural Perspective. Arjun Appadurai, ed. Pp. 64–91. Cambridge: Cambridge University Press.

LaFeber, Walter

1999 Michael Jordan and the New Global Capitalism. New York: Norton.

Leslie, Deborah, and Suzanne Reimer

1999 Spatializing Commodity Chains. Progress in Human Geography 23(3):401–420.

Marcus, George E.

1998 Ethnography through Thick and Thin. Princeton, NJ: Princeton University Press.

Mazzarella, William

1999 Mobile on the Spot: Negotiating "the Local" in Contemporary Indian Advertising. Paper presented to the Department of Anthropology, Harvard University, November.

Mintz, Sidney

1985 Sweetness and Power: The Place of Sugar in Modern History. New York: Viking Penguin.

1997 Swallowing Modernity. *In* Golden Arches East: McDonald's in East Asia. J. L. Watson, ed. Pp. 183–200. Stanford, CA: Stanford University Press.

National Research Council

1994 An Assessment of Atlantic Bluefin Tuna. Washington, DC: National Academy Press.

Ohnuki-Tierney, Emiko

1990 The Ambivalent Self of the Contemporary Japanese. • Cultural Anthropology 5(2):197–216.

1997 McDonald's in Japan: Changing Manners and Etiquette. In Golden Arches East: McDonald's in East Asia. J. L. Watson, ed. Pp. 161–182. Stanford, CA: Stanford University Press.

Ömae, Kinjiro, and Yuzuru Tachibana

1981 The Book of Sushi. Tokyo and New York: Kodansha International.

Peterson, Susan B.

1973 Decisions in a Market: A Study of the Honolulu Fish Auction. Ph.D. dissertation, University of Hawaii.

Plattner, Stuart, ed.

1985 Markets and Marketing. Monographs in Economic Anthropology, 4. Lanham, MD: Society for Economic Anthropology.

1989 Economic Anthropology. Stanford, CA: Stanford University Press.

Rakugo, Shin'ichi

1990 Sushidane Saijiki (Annual Chronicle of Sushi Toppings). Taiyo: Tokushu-Sushi Dokuhon (Special Issue of Taiyo: The Sushi Reader) No. 343(February):38–51.

Raz. Aviad E.

1999 Riding the Black Ship: Japan and Tokyo Disneyland. Cambridge, MA: Harvard University Asia Center.

Redfield, Robert, and Milton Singer

1954 The Cultural Role of Cities. Economic Development and Cultural Change 3(October):53–77.

Roseberry, William

1996 The Rise of Yuppie Coffees and the Reimagination of Class in the United States. American Anthropologist 98(4): 762–775.

Safina, Carl

1993 Bluefin Tuna in the West Atlantic: Negligent Management and the Making of an Endangered Species. Conservation Biology 7(2):229–234.

1995 The World's Imperiled Fish. Scientific American 273 (5):30–37.

Skinner, G. William

1964–65 Marketing and Social Structure in Rural China, Parts I and II. Journal of Asian Studies 24.

Skinner, G. William, ed.

1974 The City in Late Imperial China. Stanford, CA: Stanford University Press.

Smith, Robert J.

1992 The Living and the Dead in Japanese Popular Religion. Paper presented to the Columbia University Modern Japan Seminar. Sonu, Sunee C.

 1994 The Japanese Market for U.S. Tuna Products. Technical Memorandum NOAA-TM-NMFS-SWR-029, September.
 U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Region.

Tobin, Joseph J., ed.

1992 Re-Made in Japan: Everyday Life and Consumer Taste in a Changing Society. New Haven, CT: Yale University Press.

Watanabe, Fumio, ed.

1991 Maguro o Marugoto Ajiwau Hon (The Complete Book of Tuna Tasting). Tokyo: Kobunsha.

Waters, Malcolm

1995 Globalization, London and New York: Routledge.

Watson, James L., ed.

1997 Golden Arches East: McDonald's in East Asia. Stanford, CA: Stanford University Press.

Yoshino, Masuo

1986 Sushi. Tokyo: Gakken.

Zukin, Sharon

1991 Landscapes of Power. Berkeley: University of California Press.