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TOKYO METABOLISM — THE JAPANESE CONVENIENCE STORE

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HIROMI HOSOYA / MARKUS SCHAEFER

Below:
The Tokyo Ward area has a total of 5050 convenience stores.
The outlined area contains 1830 stores; 437 alone in Setagaya ward.
Courtesy the authors

As of 1996, Japan had 48,567 convenience stores with total annual sales of ¥7,378 billion.[1] The number of stores exceeds the combined number of police stations, post offices, and telephone offices in the country's metropolitan areas.[2] Since their arrival in Japan in 1974, convenience stores have fundamentally changed life in the city and are now considered one of its main amenities. The large chains usually stay open for twenty-four hours, seven days a week, bypassing regulations regarding opening hours due to their small size.[3] Yet most convenience stores are owned or franchised by large retail conglomerates. They constitute a distributed retail system with all the financial might but much greater political, economic, and urbanistic flexibility than the older larger store formats. All the convenience stores in Tokyo, whose combined size is 566,272 m², have a similar economy of scale as all the department stores, whose combined area is 704,937 m².[4] But their effect on the city is utterly different. The convenience store chains form a system that clearly shows how information technology affects the store format, the distribution of goods, the consumer, and the city. Information in alliance with corporate capital mitigates between these different entities and effectively makes them equivalent as data.

GOODS – INFORMATION – INDIVIDUALS – CITY

Convenience stores combine the virtues of brand identity, just-in-time delivery, and a highly computerised system for store inventory and consumer profiles into a network of distributed point stores. Point-of-sales data allows fine-tuning to the neighborhood's preferences, just-in-time delivery a perfectly flexible inventory, and branding the maintenance of a perceivable *Gestalt*. Forever in flux, each store molds itself to the needs of the single urbanite: its inventory is a panoply of daily life, emanating reassurance and pleasure in its ordered display, its location a function of neighborhood demand, highly mobile due to the comparatively low investment.

Compared to the franchise as a whole, single stores are just the tips of fiber-optic cables, glowing heavy with light and data. They are organs of an urban organism that is distributed, networked, and highly adaptive. In apparent randomness, though in tune with the metabolism of the city, these luminous points transform in sudden blips that fuse into the sparkle of continuous flux: 3,218 on, 1,485 off in 1996. They are subject to a strategy not a form, a network not an architecture, an algorithm not an ideology. Their urban presence is pure process – a Metabolist's dream.

GOODS – INFORMATION

7-Eleven Japan is owned by Ito-Yokado, a complex conglomerate of companies from supermarkets to real estate firms. It is the biggest and most successful of the convenience store chains and originated most of the advancements in information technology. Point-of-sales cash registers speed up the checkout operation and record data such as the Universal Product Code (U.P.C.), the time of purchase, and the type of customer. This information is processed by the company's host computer and is available to the individual stores a mere two hours later. Store clerks operate hand-held scanners and portable graphic ordering terminals, notebook-sized portable computers that provide product sales information and advice to employees as they check shelves for items to be ordered. These components are linked within the company and its suppliers via an Integrated Services Digital Network (ISDN) that 7-Eleven Japan claims is the largest of its kind in the world.

Incessantly, slow-moving items are eliminated, fast-moving ones replenished, and purchase peaks anticipated. Stores carry minimal stock and therefore offer no sale promotions. The merchandise mix is adjusted according to breadth of inventory, location, and time. Approximately 50 to 65 percent of the product lines are replaced in any one year. In the soft drinks market, for example, 7-Eleven Japan has identified the most important 70 to 80 of the 4000 available products and its stores stock these alone.[5] Overall, the franchise provides a pool of around 6000 items of which the average store carries half.[6] This product consolidation is orchestrated using information from the head office and advice from field consultants. In an iterative process of hypothesising what will sell, ordering the product, and verifying the performance, stores focus on successful products, diligently adapting to and following the demands in their 500-metre operating radius.[7]

Overall, the network generates an instant market study that can be employed for larger strategic decisions, such as the collaboration with a manufacturer or the development of a product range. 7-Eleven Japan can also insist that competing suppliers cooperate to gain access to its market.[8] From 1976 on, the company began to develop a delivery system that would allow for the consolidation of products before they arrived in stores-a revolution in the Japanese distribution system, which is still more fragmented and layered than that of any other advanced nation. Guaranteeing freshness and efficiency, deliveries now combine products from different suppliers in a system that categorises products by temperature requirements rather than by producer or wholesaler. Perishable items are strictly just-in-time delivery. Vehicles follow a timetable that may give them no more than a thirty-minute margin of error when delivering to a store, subject to some form of compensation in case the delivery is too late.[9]

With numbers so small and life spans so short, goods are just transient incarnations of the field of information that constitutes the convenience store. Conversely, they are the link, the sampling device, the sensory organ through which the metabolism of the stores adapts to the metabolism of the city.

INFORMATION – INDIVIDUALS

Of the 1.8 billion customers that visited 7-Eleven Japan stores in 1994, each was keyed in by store clerks according to age group, gender, and items purchased. From these visits some seven billion pieces of point-of-sales data were collected on the range of customers, sales volume of all products, type of products sold out, and changes in sales patterns.[10] Thus the stores gather up-to-date data on the constitution of their neighborhood far beyond any tax statistics or census information. It is a system that captures the faintest of trends and fads. In its iterative and evolutionary process of fine-tuning to demands, however, the reasons why consumers prefer certain goods over others become quite irrelevant.

The convenience stores react so fluidly to consumers' desires that they become perfectly organised and soothingly clean prosthetic extensions. In sharp contrast to the often crammed living quarters of the single working urbanite, the convenience stores have been described as "salons."[11] The people who frequent them tend to belong to the younger age groups: in 1997, 36 percent were in their twenties, 19 percent in their teens, and 18 percent in their thirties; unmarried men accounted for 39 percent of the shoppers.[12] Due to the precisely calibrated inventory, customers encounter not only a perfect representation of daily life, but also an undepletable source of organisation in the midst of the vagaries, complications, and general innuendo of urban existence.

Overall, the 7-Eleven chain sells more food than any other retailer in Japan, outstripping even the largest superstore chain, Lawson.[13] Many Tokyo residents visit the convenience store several times a day, using it as an extension of their own refrigerators. To the store, customers and products are all the same, data that is captured, analysed, and reshuffled. Perfectly value free, so it seems, the store emulates diversity and change in a regime of utmost control.

Increasingly, the stores become hubs for other kinds of information. 7-Eleven Japan pioneered the electronic payment of electric and gas bills in its stores. The company asks no payment for this service, but invests the money for the time it is in its network. Subsequently, the service has been expanded to include payment of life insurance premiums, television and telephone bills, as well as other utilities. Customers far prefer the in-store service to that of a bank, and in fiscal year 1994 over ten million such electronic payments were made.[14] The electronic network can also be used to ensure the delivery of fresh flowers or made-to-order lunch boxes. In the future, regulations are expected to be eased for the convenience stores' handling of pharmaceuticals and travel-related services.[15] Already, mail-order companies do business through the convenience stores, their extended opening hours a clear advantage over the post offices that also serve as a venue for catalogues. Freemans of London, working in cooperation with the Japanese credit card company

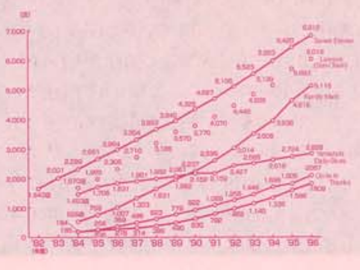
Convenience stores constructed since 1969, showing the total amount of stores, stores built and torn down, the net increase of stores and the percentage of change per year

②店舗数増加の推移

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1969	1	1	0	—	—
70	30	29	0	29	300.0
71	100	73	3	70	233.0
72	250	156	6	150	250.0
73	500	260	10	250	200.0
74	1,300	817	17	800	220.0
75	2,000	922	22	900	81.8
76	3,000	1,034	34	1,000	50.0
77	4,500	1,547	47	1,500	50.0
78	6,500	2,060	60	2,000	44.4
79	9,000	2,573	73	2,500	38.5
80	11,700	2,788	88	2,700	30.0
81	15,000	3,392	92	3,300	28.2
82	18,800	3,900	100	3,800	25.3
83	22,300	3,646	146	3,500	18.6
84	25,500	3,364	164	3,200	14.3
85	28,350	3,105	255	2,850	11.2
86	31,150	3,100	300	2,800	9.9
87	33,650	3,017	517	2,500	8.0
88	35,980	3,033	703	2,330	6.9
89	38,090	3,008	898	2,110	5.9
90	39,614	2,935	1,411	1,524	4.0
91	41,050	2,973	1,537	1,436	3.6
92	42,116	2,784	1,698	1,066	2.6
93	43,510	2,877	1,483	1,394	3.3
94	45,207	3,073	1,376	1,697	3.9
95	46,934	3,168	1,542	1,727	3.8
96	48,587	3,219	1,465	1,730	3.7

Growth of convenience store numbers by chain

④主要チェーンの店舗数推移



Activity during the 24 hours of a day

㉒時間帯別来店客数シェアの推移(%)

Main customer group: teenagers and young professionals

㉕来店客年齢別推移(%)

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	合計
92	5.3	50.5	23.8	10.2	5.3	2.2	1.3	0.7	100
93	5.8	48.9	23.6	10.8	5.4	2.3	1.4	0.8	100
94	5.7	46.4	23.5	12.0	5.6	2.4	1.5	0.8	100
95	5.6	46.0	23.4	12.3	5.7	2.5	1.6	0.9	100
96	5.4	47.7	23.3	12.5	5.6	2.7	1.7	0.9	100

Nippon Shimpan, has placed catalogues in 800 a.m./p.m. stores.[16]

Convenience stores have developed into a one-stop urban amenity, an interface of urban life with the flow of information. Like the goods themselves, they are sensors by which this flow perceives the environment and through which it evolves; they are anchors for the increasing amount of intangible qualities that brands sell, substrate for 'added value.'

INFORMATION–CITY

Whereas real estate advertisements once focused on proximity to a train station or a public bath house, the location of a convenience store has now become the measure of desirability in the urban environment. To ensure stability, the expansion policy of 7-Eleven Japan is based upon a market dominance strategy built around clusters of 50 or 60 stores. The company recruits store owners and converts their stores, following a strict long-term contract. Through such local saturation and clustering, 7-Eleven Japan gains a high-density market presence and thus improves advertising and distribution systems, heightens brand awareness, increases the efficiency of franchisee support, and prevents competitor entrance into the local areas. Thus despite a large number of stores, 7-Eleven Japan is still present in only 21 of Japan's 47 prefectures.[17] Lawson, on the other hand, has a strategy of nationwide coverage, building brand awareness over the entire country. Simultaneously, even though the difference in performance between chain stores and independent convenience stores is minute, the number of small stores is in rapid decline.[18]

At one level, the structure of a city can be perceived by its blocks, roads, and parks. On a different level, the city can be seen as a composition of convenience stores, each one ever so slightly affecting rental and real estate values in its surroundings. These chain stores overlay a new network of points onto the city, a network whose mode of expansion and contraction is much freer and more elastic compared to the physical structure of the city. Deceptively mundane, the stores are ephemeral polling and pollinating organs, transient fruit-bodies of information. Behind the scenes, the information networks are increasingly integrated, connecting the store to a worldwide repository of proprietary data and know-how. By investing in Bit Structures – the underlying metabolism – rather than inventory, production, or large real estate, 7-Eleven Japan is able continuously to update in an environment of rapid obsolescence and to follow any shift in the landscape of shopping. It represents a system that can follow the metabolism of the city, with ease and even profit.

The Metabolists attempted an expression of the collective, a proposition for the coexistence of technology and man and for a Japanese form of modernist individualism.[19] They proposed group forms and megastructures to gain conceptual control and to achieve formal coherence in a city of accelerated modernisation. But as captives of the ideal of single concept and sole agent and as producers of form, they were confined to mere representation. Tokyo's convenience stores conjure an urbanism where capital acts in the city almost without friction, where a corporation achieves coherence of concept and identity in the urban realm with relative ease by means of information and brand management and where diversity and freedom of choice is represented (rather than truly enabled) by the anticipation and creation of desire. The network is oblivious to actual content and impermeable to individual intervention, yet constantly fine-tuning itself to the metabolism of the city. It is the Metabolists' dream in its starkest, most pragmatic, and so far most successful implementation. The problem of the Metabolists was that they were architects.

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[1] See "Japanese Little Shops Are a Big Hit," *Market Asia Pacific* (July 1997), and MCR (Manufacturer Convenience Store Researcher), "Nihon konbini sangyo deta shu," *Kikan Konbini* (Spring 1997).
[2] According to MCR, "Nihon konbini sangyo deta shu," and the telephone book of Tokyo there is a total of 1,218 convenience stores in the wards of Shinjuku, Shibuya, Setagaya, Nakano, and Suginami as compared to a combined total of 315 police stations, post offices, and telephone offices.
[3] "Convenience Stores Facing Tougher Competition in Japan," *Asia Pulse* (May 1997).
[4] According to the Japanese Department Store Association, as of September 1997 there were 31 department stores in Tokyo with an average size of 22,739.9m² versus 5,050 convenience stores with an average size of 112.1m².
[5] Leigh Sparks, "Reciprocal Retail Internationalization: The Southland Corporation, Ito-Yokado and 7-Eleven Convenience Stores," Service Industries Journal 15 no. 4 (1995): 57-96.
[6] Roy Larke, Japanese Retailing (London: Routledge, 1994), 150.
[7] Ibid., 144.
[8] Ibid., 152.
[9] Ibid., 150.
[10] Sparks, "Reciprocal Retail Internationalization."
[11] *Studio Voice* 267 (September 1997).
[12] "Japanese Little Shops Are a Big Hit."
[13] Larke, *Japanese Retailing*, 153.
[14] Sparks, "Reciprocal Retail Internationalization."
[15] "Convenience Stores Facing Tougher Competition in Japan."
[16] "Catalogers Eye Japan's Convenience Stores," *East Asian Business Intelligence* 12, No.13 (1997): 6.
[17] Sparks, "Reciprocal Retail Internationalization."
[18] Larke, *Japanese Retailing*, 113.
[19] See Fumihiko Maki, *Investigations in Collective Form* (St. Louis: The School of Architecture, Washington University, 1964), and Kisho Kurokawa, *Architecture de la symbiose 1979-1987* (Milan and Paris: Electa France, 1987), and idem, "Grave-post of Contemporary Architecture," in *Gendai no kenchikuka: Kisho Kurakawa* (Tokyo: Kajima Publishing, 1979).

Statistics source:
MCR (Manufacturer Convenience Store Researcher), 'Nihon Konbini sangyo deta shu.' in *Kikan Konbini* (1997, spring)

Reasons for abandoning a convenience store, including 'imperfect display (no.6)' and 'the sales person looks at my face too much (no. 20)'

44 私はなぜコンビニの利用をやめたか

Quality assurance: 'Alien substances' in convenience store products and where they are found

52 部門別異物混入事故件数