

Complementary Currencies in Japan Today: History, Originality and Relevance

Bernard Lietaer

Chairman ACCESS Foundation

POBOX 4006

BOULDER CO 80306-4006

Email: Bernard@accessfoundation.org

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Abstract

Since 1995 the number of experiments with complementary currencies in Japan has exploded. Not only is Japan the country in the world with the most systems in operation today, but also the nation with the greatest diversity of such experiments. The aim of this paper is to bring to light the strata of the heterogeneous Japanese schools of complementary currencies, and describe how they relate to each other. It provides a description of the different models used in each school, as well as their numbers and locations. Finally, the most original models are highlighted, and the relevance of these experiments for the rest of the world is evaluated.

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Japan is the first country in the world where more than 600 complementary currency systems had become operational as of the end of 2003. More importantly, it is also the country where the largest diversity of complementary currency experiments is on-going today. Nevertheless, remarkably little is available in any other language than Japanese on this topic. Even more surprisingly, within Japan itself the full range of currency experiments is rarely perceived because different Japanese “complementary currency schools” have tended to ignore each other.

The aim of this paper is to provide an overview of how the various strands of complementary currencies strategies have evolved, complete with a snapshot of the situation as of May 2003. It is based on several trips to Japan over the past two years, personal interviews with key participants and originators of the different “schools”, and completed with literature published in Japanese both on paper and on the Net. All published materials will be footnoted.

This material will be presented in eight sections, as follows:

- I. Background
- II. The First Pioneers
- III. Hotta-san and the Fureai Kippu system
- IV. Kato-san and the Eco-money systems
- V. Grass-root initiatives
- VI. Some Innovative Models
- VII. An Inclusive View and Future Dynamics
- VIII. Conclusion: Why Japan?

I. BACKGROUND

Complementary currencies are agreements within a community to accept something else than legal tender as a means of payment. They are sometimes called community currencies, local currencies or “common tender”. But some of these common tender currencies are not local, and some have purposes other than community building. Because they are designed to function in parallel with conventional money - not replacing but complementing national currencies- we will use the terminology of “complementary” to describe them.

Historically, complementary currencies have been very generally in use in many parts of the world throughout most of history. In Western Europe, they have been documented uninterruptedly from roughly 800 AD to 1800 AD. (Amato, Fantacci, and Doria, 2003).

The gradual generalization of the gold standard and the creation of national monopolies suppressed the operation of these smaller scale local systems. Interestingly, in Japan complementary currency systems were also operational until 1868 (i.e. before and throughout the Edo period). They were typically organized within the Han structure (local or regional lordships) (Maruyama, 1994, 1999).

In Japan, the explosive growth of contemporary complementary currency systems dates from the mid-1990s. Japan had been hit by a major economic crash in 1990, and has not really recovered since. However, contrary to general belief both inside and outside of Japan, the earliest pioneering efforts worldwide in post-WW2 complementary currencies can be traced to Japan as well, although those efforts have remained mostly unsung to this date. That is why we will start by putting the spotlight on those earliest pioneers.

II. THE FIRST PIONEERS

It seems that the earliest pioneers of contemporary complementary currencies in Japan have been generally ignored, both inside and outside of Japan (Ichien, 1991, 1994). The main reason seems to be that they were women. The first such pioneer in chronological order was Teruko Mizushima, who was born in 1920 in Osaka. She wrote in 1950 a visionary article about a “Labor Bank”, a paper that was honored at that time with the Newspaper Companies’ Prize. It developed the core idea of a time-based complementary currency and a time bank. In 1973, Mizushima formally established her own “Volunteer Labor Bank” in Osaka. This was part of the emergence of a “women’s cultural movement” that is still on-going today. By September 1975, it had over 1000 members. In September 1979, this system counted more than 3000 members and extended its network all over Japan. One example of such a system was the “Bank of Goodwill” operational in Kansai. In March 1982, it even set up an overseas branch in California, U.S.A. In September 1983, Mizushima (1983) fleshed out her conceptual vision in a full book. By then there were over 3800 members in her network, organized in 262 branches. It dealt with a variety of voluntary work such as care for the elderly and disabled, childcare, or volunteer work in hospitals. The total amount logged in for this kind of work during 1983 was more than 480,000 hours.

It also dealt with mutual help work among its members in such occasions as child birth, sickness, or travel, by doing almost anything for each other: from cleaning the house, cooking, baby-sitting and nursing, to taking care of pets. The total hours provided in these types of intra-membership activities amounted to over 20,000 hours in 1983. This part of their activity is similar to the mutual credit systems that would emerge more than a decade later in the West, like Time Dollars.

Another woman, named Michiko Kanema, started another set of complementary currencies within the context of Christian churches in Takamatsu City in Kagawa

Prefecture in 1985. Some of her collaborators moved to other areas, and started similar systems. This ended up forming a second network among church-based systems.ⁱ

Other forerunners of time deposit systems were the “Help of Daily Living Association” in Tokyo that was established in 1981 and the “Kobe Life Care Association” that was established in 1982. By 1989, these associations had grown respectively to 1,559 and 1,589 members.ⁱⁱ These organizations received also small amounts of conventional money from the recipients of the services in order to pay for the overhead and out-of-pocket costs that were incurred by the service providers. Some of the service providers deposited part or all of the funds received in this way in a special account so that it could be used in case of need for themselves or for relatives and friends.

By June 1990, at least 46 other organizations were operating in Japan based on that principle. They took different legal forms: nine of them were citizens’ voluntary organizations; fifteen others were part of local social welfare councils; twelve were cooperatives; and the last ten were semi-public organizations (Ichien, 1991).

The rapid subsequent development of the various “complementary currency schools” in Japan in the second half of the 1990s was substantially helped by these pioneering networks already in existence. The first - but not the only one - to directly benefit from the fertile ground prepared by these informal systems was the Fureai Kippu network that will be described next.

III. HOTTA-SAN AND THE FUREAI KIPP

At his retirement in 1991, Mr. Tsutomu Hotta, a highly respected former Attorney General and Minister of Justice, decided to focus his energies on the growing issue of elderly care in Japan. Japan is the country with the fastest aging population in the world. For this purpose he created the Sawayaka Fukushi (Sawayaka Welfare) Center which became later an Institute.

Mr. Igarashi, the secretary general, was part of a work group of lawyers and organizers initiated by Mitsuya Ichien (1994) who worked for one year to produce a new report on complementary currencies published in September 1994. Hotta-san’s idea was to encourage 12 million volunteers with the “Fureai Kippu (“caring relationship tickets”) that was officially launched at that point. This report also proposed to establish a fund for a formal clearing system that would be the final stage of networking, and could be run by different organizations.

The next event was the powerful earthquake that hit the Kobe area on January 17, 1995. The capacity of intervention by the Japanese government during an event of this scale was clearly overstretched, and a spontaneous grass-root volunteer movement sprung up to provide help in a wide range of needs that arose at that time. Hotta-san started two significant initiatives within this context. He became one of the key lobbyists for

introducing the first legislation for non-profit organizations in Japan. This lobbying was successful and such new legislation was finally enacted in 1998.

He also was instrumental in launching a major symposium that was organized in September 1995 in Osaka for the promotion of volunteer organizations, focusing on time-based complementary currencies. At its conclusion, Mr. Naoteru Tanaka decided to write a book on social organizations including dialogues between Hotta-san and Mitsuya Ichien that formally advertised the goals of the Fureai Kippu movement.

There is remarkably little public information available about the Fureai Kippu system even at the Sawayaka Foundation. The only data that is on hand centrally is the number of branches operational every year. Neither the total number of participants, nor the hours logged or cleared are tracked in the headquarters.

The number of branches grew as follows:

1992 (including those known under other names than Fureai Kippu): 113

1996: 228

1998: 302

2001: 361

May 2003: 372.

IV. KATO-SAN AND ECO-MONEY

Toshiharu Kato has followed a remarkably unusual career for a Japanese bureaucrat. He was Director of the Service Industries Division at the Ministry of Economics, Trade and Industry (METI) - the most powerful coordination institution between government and the corporate world. He gained a seniority of over 20 years in this institution, something quite significant in Japanese public administration. In the early 1990s he decided to take a three-year break to personally conduct a study on two types of high-tech development models: the “Route 128 model” and the “Silicon Valley model”, respectively on the East and West Coast of the US. The former is named after the growth of high-tech companies around a nucleus of large corporations (e.g. Raytheon and Hewlett Packard) and universities (e.g. MIT, Harvard) in the Boston Area; the latter refers to the proliferation of small high-tech computer companies and Venture Capital firms that conglomerated southeast of San Francisco near Stanford University. He concluded that the “Silicon Valley Wave”, based on high-density contacts among hundreds of small corporations (without large companies at the center), is the wave of the future for Japan. More impressive still, he pushed this regional development strategy to its logical end by introducing a new concept of regional currencies, which he called “eco-money”. He created the Eco Money Networkⁱⁱⁱ as a non-profit organization that provides local regions with the support needed to introduce local and regional currencies. The functions of that network are:

- To analyze the needs of a community
- Design a complementary currency system to fulfill those needs
- Support the practical introduction of the system including an implementation manual.

- And study the results.

That network also cooperates with corporations that are part of the “Ecomoney Business Consortium”. Some big corporations have become involved in this process: for instance Nippon Telegraph and Telephone (NTT) is developing software systems in the context of its “Daily Life Welfare Information Network” project (which includes city governance, local businesses and non-profits, healthcare and welfare information, job training and volunteer information, etc.). Similarly, Oracle Japan has been involved as well. Recently, Kato-san left temporarily the METI again, this time for an academic post in Tokyo because it gives him more flexibility to experiment with eco-money systems.

The eco-money projects vary from a small village of a couple of hundred people (Yamada in the Toyama prefecture), to a town of 16,000 people (the Kurin currency in the city of Kuriyama in Hokkaido) and whole prefectures (equivalent to a county; specifically Shizuoka, Chiba and Shiga prefectures). Some include LETS type currencies, others “Fureai Kippu” (described in the next section) and still others integrate various services into a single smartcard system. One system integrates an impressive list of 27 different types of activities including welfare, education, disaster prevention, environmental protection, services promoting the understanding of cultural assets, as well as a series of “civil businesses” such as enterprises providing natural foods for children with allergies to chemicals, production of soap made from recycled cooking oil, and at-home care for the sick and elderly. Another example: large scale projects co-designed with the Meio University like the LOVE (Local Value Exchange) system of Yamato, a city of 211,000 people where the complementary currency is managed via a dual magnetic strip and smart-card.

The common characteristics of all eco-money projects are that:

- They are all designed by Kato-san’s team under his direct supervision.
- They focus on services only - no goods are exchanged for ecomoney;
- They are all “experimental designs”, trying to be as different among each other as possible to accumulate a broader experience to determine what works best for what purpose;
- Many projects are temporary, in the sense that they are implemented for a pre-determined time period (one and a half to three years) and then stopped at that point.

As a consequence of this last characteristic, the number of eco-money projects operational at any point in time is growing modestly. From four initial pilot projects the experiment expanded in 1999 to ten different implementation models. And during 2003 about 35 different models were being experimented with in parallel.

V. GRASS-ROOT INITIATIVES

We will label the last school of complementary currency systems in Japan as the “grass root school”, because it doesn’t have a recognized national leadership. It is the youngest school, as it started as recently as 1999. But it has been remarkably dynamic: it grew from only 9 systems nationwide in 1999 to 175 as of end April 2003.

One reason for their proliferation seems to be a political assertion by grass-root movements who do not want what they perceive as “centralized leadership” in community currencies. They have been rejecting not only the Eco-money projects for instance, but also centralizing influences from other parts of Japanese society. For example, Dr. Karatani an activist of the communist party of Japan had tried to start a LETS’Q project in Tokyo on an ideological basis. This project died after 2 years - it purportedly was rejected because of the ideological orientation of this complementary currency.

Another example, an “Earthdaymoney” project, has been launched in Tokyo in 2000 with the unusual characteristic of being initiated by Hakuodo, one of the largest and most established advertising agencies in the country. Hakuodo was founded in 1895, and has grown to more than 3500 employees. Their complementary currency is used to recompense people who “do something good for Shibuya (the trendy neighborhood of Tokyo where the advertising agency’s headquarters are located) and for the ecology of the world.” It uses a state-of-the-art smart-card system and its credits can be used as discounts in participating businesses of the area. The marketing of this project has been – for obvious reasons – very sophisticated, including what is probably the fanciest website about any complementary currency anywhere (www.earthdaymoney.org). Although the project has ostensibly a good intent, it unfortunately has not really taken off. The total volume of exchanges since its beginning is estimated at the equivalent of only about US\$3,000. There seems to be a lingering suspicion among grass-root activists that this project is not arising from genuine social or ecological concern, but is an attempt at using the good image of complementary currencies for one corporation’s benefit.

So what are “genuine grass-root” projects all about? One could consider the grass root complementary currencies as the true heirs to the “early pioneer” movement described earlier. It is also the school that is most similar to what has been happening with complementary currencies in other developed countries, such as the UK, North America, continental Europe, Australia and New Zealand. This is further confirmed by the fact that the majority of these projects have been inspired by foreign complementary currency models that are imported from abroad (LETS, Time Dollars, and Ithaca Hours are the most frequently mentioned models). However, several more innovative models have been appearing recently in the grass roots movement, models whose originalities will be highlighted in the next section.

The most complete sources for the recent developments of this school of complementary currencies are the various publications by Mr. Rui Izumi.(2001, 2002, 2002a, 2003). We

will therefore rely extensively on his work to describe this particular group. Figure 1 shows the developments of grass root community currencies in Japan. The horizontal axis shows the economic areas where community currencies work, mapping them from the ones working in the informal economy on the left end, to the ones operating in the formal commercial economy on the right side. The vertical axis shows the approximate time evolution when these systems became operational in Japan. The various influencer currency systems and their recipients are self-explanatory from the graph (Izumi, 2001).

Fig. 1: Mapping Influences on Japanese Grass-root Complementary Currencies

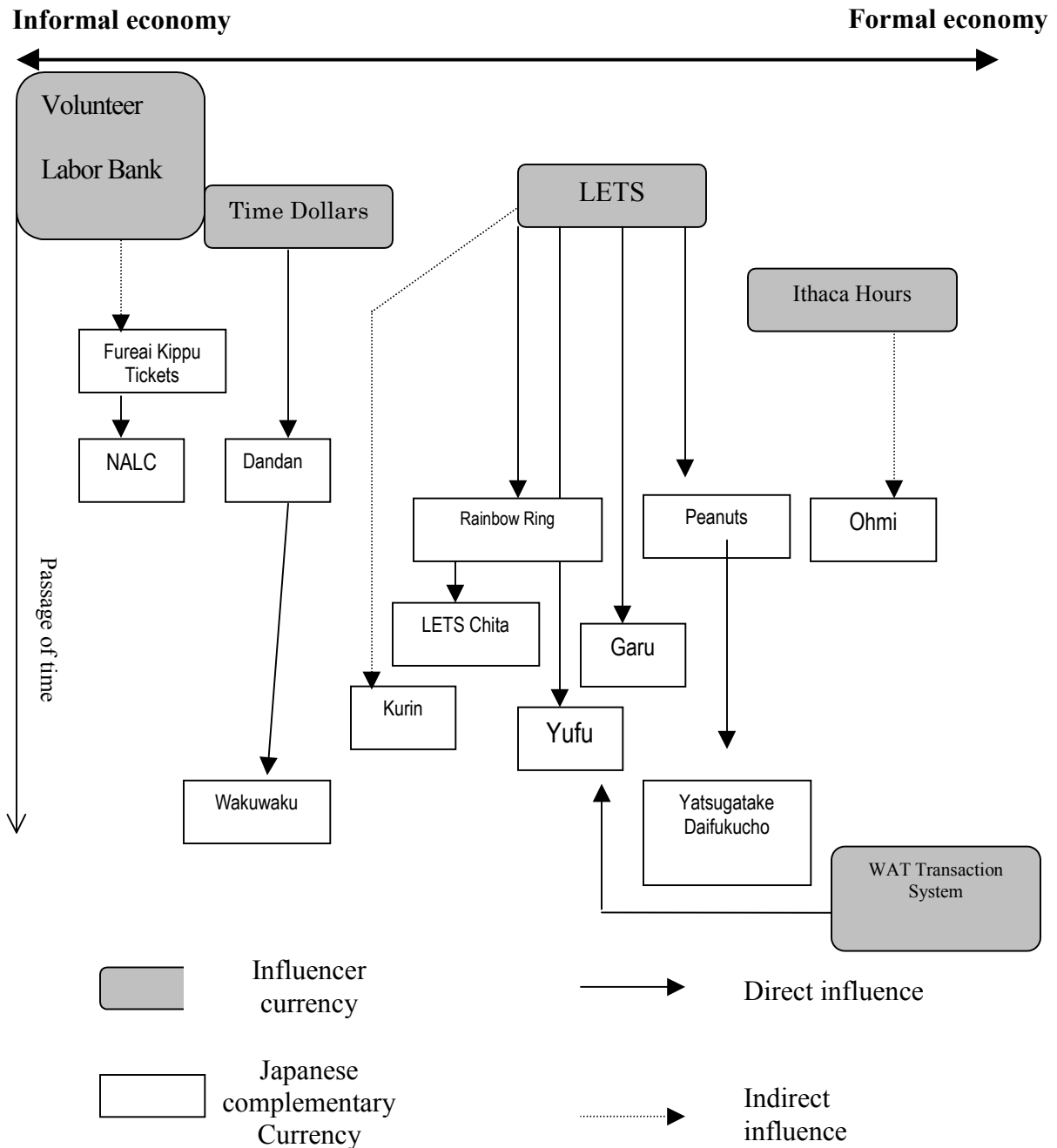


Table 1 gives some details of a small sampling of the 175 Japanese grass-root currencies operational today.

Table 1: Major Japanese Community Currencies.

Name	Location	Active Area	Foundati on Date	Syste m Type	Members hip Fee	Unit of Account	Number of Members
Garu	Tomakom ai City	Tomakom ai and its surroundin g area	March 2000	Accou nt (Book)	Yes	1 garu=About 10 yen	70 individuals
Kurin (Third Experiment)	Kuriyama Town, Hokkaido	Kuriyama Town	Sept. 2001	Coupo n (3 types)	No	1,000 kurin =60 minutes, 500 kurin = 30 minutes, 100 kurin = any value	570 individuals
Peanuts	Chiba City	Chiba Prefecture (Including non-Chiba residents)	Feb. 1999	Accou nt (Book)	No	1 pea = 1 yen, 1 hour's work = 1,000 pea	560 individuals, 23 shops, 13 farms, 2 welfare facilities
COMO	Tama City	Tama Newtown and its surrounding area	June 2000	Coupo n (3 types)	Yes	About 1,000 COMO for 1 hour's work	99 individuals
Yatsugata ke Daifukuch o	Takane Town, Yamanashi Prefecture	Southern foot of Yatsugata ke Mountain	May 2000	Accou nt (Book)	Yes	1 fuku = 1 yen	90 families, 12 shops
LETS Chita	Handa City, Aichi Prefecture	Chita Peninsula	April 2000	Accou nt and due bill	Yes	1 C = 1 yen	70 individuals
Ohmi	Kusatsu City, Shiga Prefecture	Kusatsu City	May 1999	Coupo n (2 types)	No	1 ohmi = about 100 yen, about 90 minutes' work = 10 ohmi	About 200 individuals, 1 shop, 1 company
Wakuwaku	Niihama City, Ehime Prefecture	Ohshima, Niihama City	May 2000	Coupo n	Yes	1 point (wakuwaku) = 1 hour's work	70 individuals
Dandan	Sekizen Village, Ehime Prefecture	Sekizen Village	July 1995	Coupo n	Yes	1 point (dandan) = 30 minutes' work	70 individuals

Yufu	YufuinTown, Oita Prefecture	Yufuin Town	April 2000	Account and due bill	Yes	1 yufu = about 10 minutes' work = about 100 yen	80 individuals, 17 shops
WAT Transaction System	n/a	Nationwide	Aug. 2000	Due bill	No	1 WAT = 1 kw/h of Citizen-owned powerplant = about 100 yen	Unmeasurable due to system structure
Rainbow Ring	Yokosuka City	Nationwide	Oct 1999	Account (Book)	Yes	1 R = about 1 yen	200 individuals, 14 shops

Table 2 and 3 summarizes a survey carried out by Mr. Izumi through interviews and e-mail inquiries, and identifies the model, its unit of account and its size. He noted that 52% of all the “grass root” complementary currencies use coupons, 24% record transactions in booklets, and a few others use the Internet, chips, or bills of exchange. In Europe, the US, Australia, and New Zealand, almost a monoculture of systems prevails (mostly LETS and Time Dollars). In contrast, even considering only the grass root school, Japan has a much wider variety of currency types as shown in the tables. His key conclusion: “The fact that various currency types were introduced and spread nationwide almost simultaneously is one of the main characteristics of Japanese community currency activities.

Table 2: System Types and Units of Account of Grass-root Currencies (May 2002)

...System Type	Account System			Coupon System		Due-bill System	Multiple System	Total
	Book	Internet (Online)	IC card	Coupon	Chip	Due Bill	Multiple Systems Used**	
Time-based	8	3	0	24	6	0	0	41
Yen-based	9	0	0	26	1	5	3	44
Time- and Yen-based	13	2	0	12	0	2	5	34
Transaction-based*	1	0	0	3	0	1	0	5
Others	1	0	1	5	1	2	0	10
Total	32	5	1	70	8	10	8	134

* For example, one coupon is supposed to be issued for one transaction of goods or service.

** Most of the systems use both booklets and bills of exchange.

More than half of the grass root systems remain small, with less than 100 individual members. Of the five organizations with 1,000 members and over, three are operating nationwide, usually with local branches consisting of tens or hundreds of members each. Between the size and the business members' participation, a positive correlation can be seen constantly for currencies with 100 members and over. Most of the currencies that have less than 100 members and have no business members are categorized into the “booklet and time-based” or the “coupon and time-based” type in Table 2. This suggests

that their organizations seek to maintain and enhance the cohesion and solidarity within their communities.”

Table 3: Size and Business Members’ Participation

	Less than 100 Members	100-999 Members	1,000 Members and More	N/a.	Unmeasurable*	Total
Business Members Participated	35	21	3	12	9	80
No Business Members	35	8	2	9	0	54
Total	70	29	5	21	9	134

*Community currencies using coupons or due bills unofficially allow non-members to use them, making it difficult to measure the actual number of participants especially if the system has a large number of business members, or it offers easy access to the currencies.

To get a flavor of the speed of change in these grass-root currencies, in exactly one year after the survey performed by Rui Izumi (April 2002-April 2003), a total of nine systems have stopped operating. Five of those were stopped not because they failed, but because they were designed as experimental systems in the first place. They were therefore initiated with a planned termination deadline. One more has died because of lack of participants and three others for a variety of other local reasons. But no less than *sixty* new ones have been started in that one-year period!

Next, we will highlight the innovative features of some of the Japanese systems.

VI. SOME INNOVATIVE MODELS

This section will put the spotlight on some Japanese complementary currency systems that are experimenting with new models or features. As mentioned earlier, Mr. Kato’s eco-money experiments are each purposely trying to be different so as to accumulate a practical experience of what is working best for various applications. But it would be erroneous to believe that those are the only innovations on-going in Japan. Original features are appearing also in projects that are initiated by grass-root activists or those sponsored by local authorities. Instead of trying to describe each system in full detail, we will highlight only the most original features of each system, so the length of the description will vary according to the numbers of such features.

There are several recent systems that are using units of account related to energy. Two examples: the WAT and the Charcoal system, which will be summarized below.

The WAT is the brainchild of Mr. Eichi Morino, the head of the Gesell Research Society Japan, who launched it in August 2000.^{iv} Its unit of account - the WAT - is equivalent to 1 kWh of electrical current generated by citizens’ cooperatives through renewable energies (wind, water, sun). One WAT is valued at about 75-100 Yen (roughly 60-90 US cents), or about 6 minutes of human work. The instruments of payment are

bills of exchange, a paper IOU widely used among businesses in Japan. A WAT bill of exchange is therefore a paper issued typically by a business; its recipient can use it to pay other people so that it circulates until it returns to the issuer who at that point honors it by providing goods or services for the amount of the bill, and destroys the bill afterwards.^v In contrast with the client-server exchange structure (where one central computer records all the transactions, as is the case with LETS or Time Dollars), this is a peer-to-peer approach. There is no central control over the system by an office or a coordinator, and therefore also no membership fee or administrative charge. The association of WAT-friends exists only to distribute WAT-forms and to publish an information bulletin. Even obtaining these WAT-forms is free: they can be downloaded from the WAT-website, and there are also businesses that cover the printing costs in exchange for adding a little advertising for themselves on a removable side flap. Some groups of businesses issue joint bills, and some individuals issue their own as well. The acceptability depends on the level of trust among the people involved, and – a bit like on e-Bay auctions – reputation matters. Anybody accepting a bill automatically becomes a “member”. This system is now spreading rapidly and widely in Japan, but by its very design nobody knows exactly what scale and how many participants are involved. It has to be one of the most cost-effective means of payment in existence, and it spontaneously creates “circles of trust” among sub-groups of participants. The detailed procedure of how a WAT-transaction is completed is explained in English on www.home.debitel.net/user/RMittelstaedt/Money/watto-e.htm.

There are also hybrid structures involving peer-to-peer and client-server exchanges. For instance, the Genki-koukan system in the Yamanashi Prefecture makes it possible for any participant to issue his or her own business currency as in WAT, but in addition there is central server that manages a local market for the papers issued. The Gengi-koukan system involves more than 20 businesses as well as a few hundred individuals. In practice here again, the bulk of the papers accepted and circulated are those issued by businesses as those they tend to obtain a higher trust level than most individuals. Finally, high-level electronic security systems are being developed by the Iwate Prefectural University to eliminate the risk of frauds, reuse or denial of reception with electronic WAT receipts (Namikawa, 2003).

There also exist some interesting complementary currencies that have a formal backing. One such system uses a bioregional currency in Osaka, where the unit of account is a gram of charcoal. Charcoal is a widely produced and used product in the area, and as the currency is redeemable in this good, its acceptance is spreading easily.^{vi} Another one is a “leaf” currency circulating in Yokohama prefecture, which is backed by farmer’s crops. Here the currency is redeemable for produce during the crop season. Since April 2003, farmers in the Kobe area have been copying this model for their own area.

A more sophisticated approach has been introduced by the city of Rubeshibe in Hokkaido. Given that interest rates are now practically down to zero in Japan, this city has issued a zero-rate bond that people can purchase in Yen. The interesting feature is that the purchaser gets nevertheless interest - but in the form of farm produce at the moment of the crops. Part of the money so raised is used by the city government to

purchase this produce directly from farmers to stimulate the local economy - so the circle closes neatly.

Still another model can be seen in a group of local businesses in the city of Tokoname in the Aichi Prefecture that issues “blue tickets” redeemable as discounts in those businesses. The city administration is giving its formal support to that system now, and it has grown to a fairly large participation. Three similar developments are now operational elsewhere in Japan, including Okinawa and Miyako-jima.

Peanuts is probably the most successful “grass-root” system in Japan so far. It operates since February 1999 in Chiba Prefecture, and involves more than 600 participants including local farmers, small businesses and individuals. One reason reported for the success of this variation of LETS is a 1% per month demurrage charge on the currency. Demurrage is the opposite of interest – it is a “parking charge” for keeping the currency instead of circulating it. This charge is only applicable to the positive balances, in order to encourage its circulation.

VII. AN INCLUSIVE VIEW AND DYNAMICS AMONG SCHOOLS

Anybody attempting to get a comprehensive snapshot of complementary currencies experiments currently ongoing in Japan should accept that it will be incomplete. But by regrouping them in the different complementary currency schools, at least some of their dynamics can be tracked. The following graph illustrates the number of systems that are operational in a given year, and regrouped by school. While some of the Pioneer systems are still functioning independently today, it appears that they prepared a very fertile ground for the seeding of the Fureai Kippu systems from 1995 onwards. This explains the unusually rapid growth of this elderly care complementary currency system after that date.

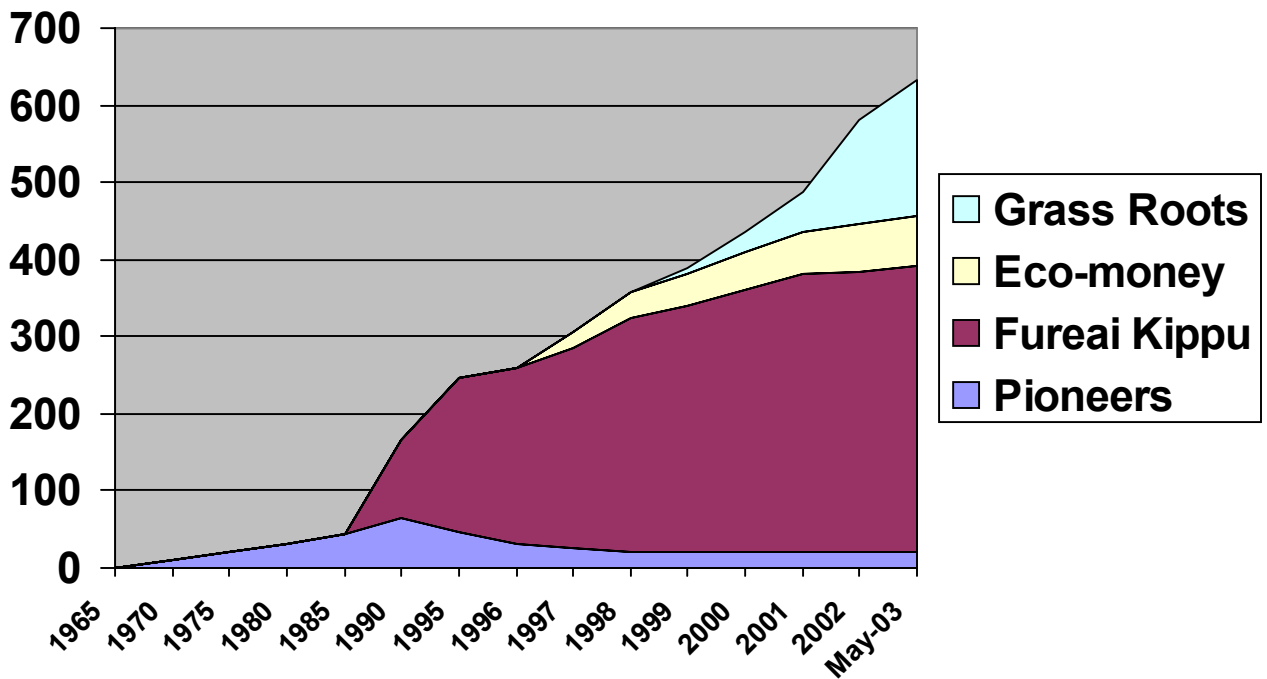











Figure 2: Number of complementary currency systems operational in Japan, by school. 1965- May 2003

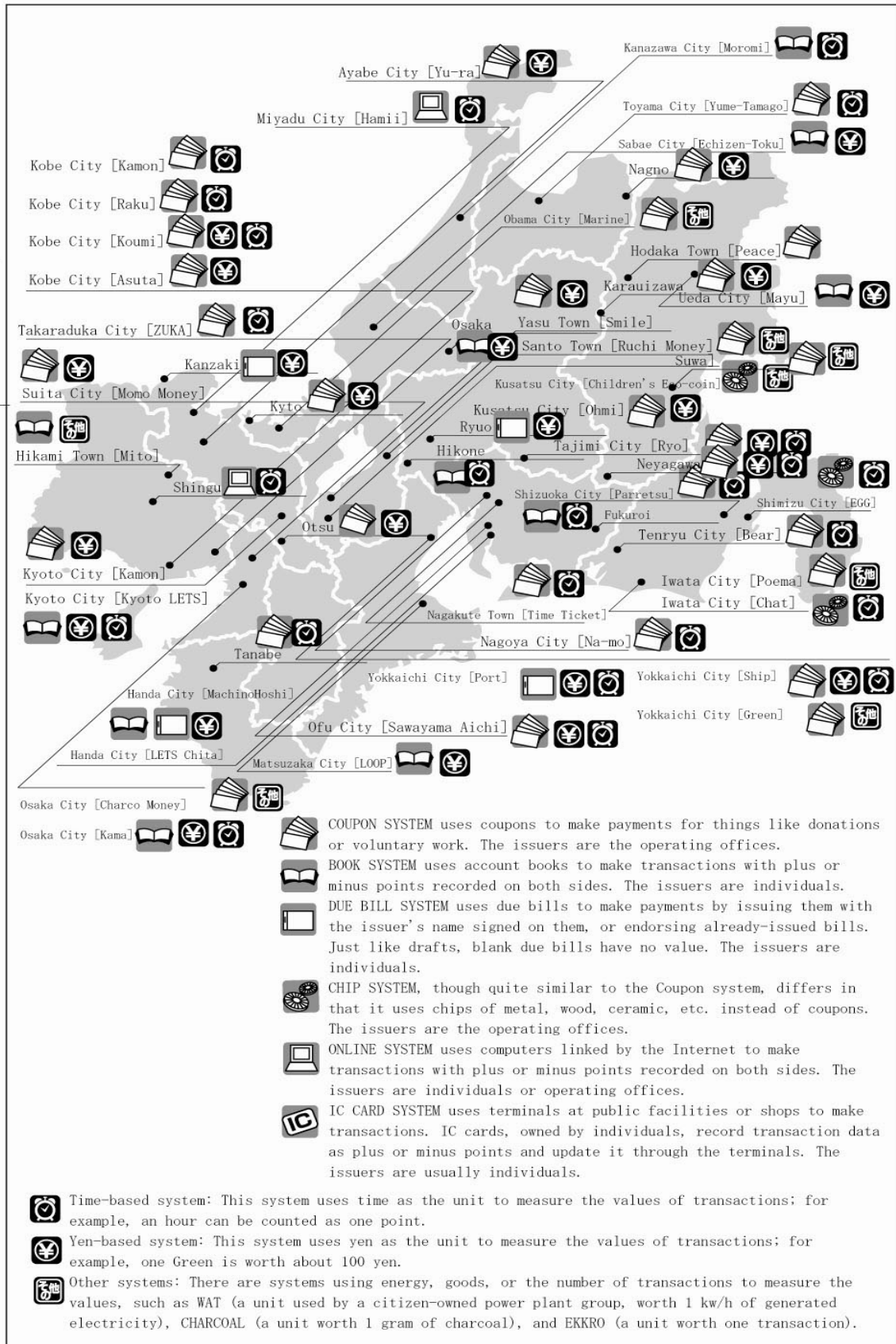
In contrast with Fureai Kippu systems, the number of eco-money systems operational in any given year is only growing slowly, as their very purpose is experimentation. As stated earlier, eco-money systems are typically designed as temporary experiments with a built-in deadline of termination or mutation to a next phase. Finally, the remarkable fast growth of the grass-roots projects seems – at least in part – attributable to the participant’s reaction against “centralizing systems”. On the one side, such a lack of cooperation among different complementary currency schools is regrettable because it may entail some forgone learning across them. But the silver lining of this situation may be that this bit of competition has also motivated unusual creativity within some of the groups.

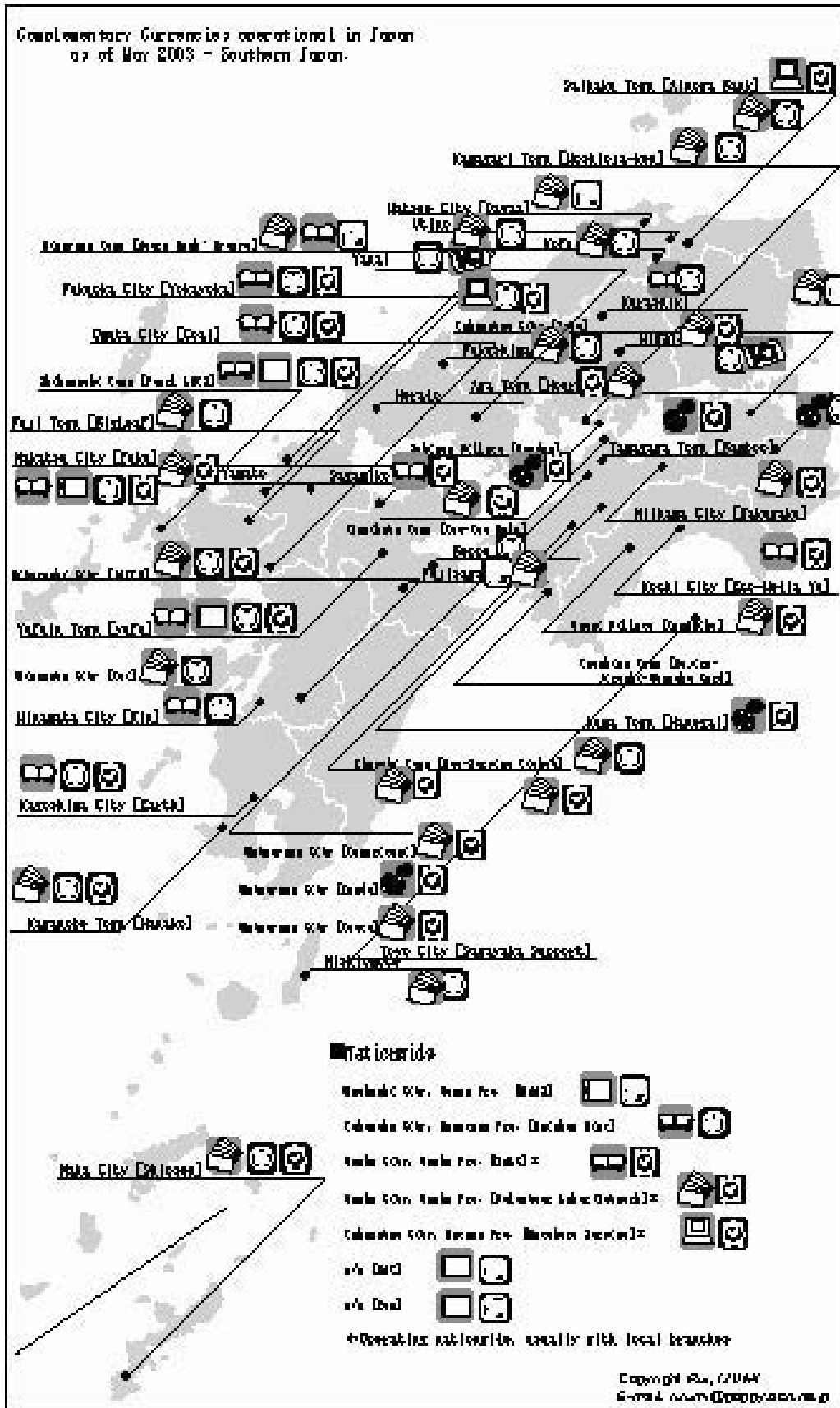
To complete this overview, the following map of Japan provides an idea of the geographical distribution of the systems, as well as some of their key characteristics. The starting point for this map was the one published about the grass-root systems as of April 2002 (Izumi, 2002b). It has been updated to account for the 9 grass-root systems that have stopped operating since that time, and the sixty new ones, using the same symbols as in the original maps. We decided not to include the 372 branches of Fureai Kippu as they would simply overwhelm the map to the point of making it unreadable.

○Description of Symbols Used in the Map

- Coupon system : This system uses coupons to make payments for things like donations or voluntary work. The issuers are the operating offices.

- Book system : This system uses books to make transactions with plus or minus points recorded on both sides. The issuers are individuals.
- Due Bill system : This system uses due bills to make payments by issuing them with the issuer's name signed on them, or endorsing already-issued bills. Just like drafts, blank due bills have no value. The issuers are individuals.
- Chip system : Though quite similar to the Coupon system, this system differs in that it uses chips of metal, wood, ceramic, etc. instead of coupons. The issuers are the operating offices.
- Online system : This system uses computers linked by the Internet to make transactions with plus or minus points recorded on both sides. The issuers are individuals or operating offices.
- IC Card system : This system uses terminals at public facilities or shops to make transactions. IC cards, owned by individuals, record transaction data as plus or minus points and update it through the terminals. The issuers are usually individuals.
- Time-based system : This system uses time as the unit to measure the values of transactions; for example, an hour can be counted as one point.
- Yen-based system : This system uses yen as the unit to measure the values of transactions; for example, one GREEN is worth about 100 yen.
- Other systems : There are systems using energy, goods, or the number of transactions to measure the values, such as WAT (a unit used by a citizen-owned power plant group, worth 1 kw/h of generated electricity), CHARCOAL (a unit worth 1 gram of charcoal), and EKKORO (a unit worth one transaction).





To conclude, we will focus on some of the significant trends identifiable in the field of complementary currencies in Japan.

First of all, one can see a growing involvement of and support by local authorities for the various complementary currency systems that are arising in their area. Increasingly, local and regional governments are even taking the initiative for such systems. In contrast, hitherto the national level has treated mostly complementary currencies with “benign neglect”, as is also the case in Europe, the US, Australia or New Zealand. In August 2002, the minister of economy and industrial policies in Japan has suggested that the use of local currencies would bring an end to the long-lasting deflation of the Japanese economy by supplying additional monies of various types at the local level (Maruyama, 2003:183). However, nothing spectacular should be expected from the central government until – in the traditional Japanese way - a formal consensus can be reached on what models are optimal for what purpose.

A second significant trend is the beginning of an integration and interconnection among systems. The LOVE currency of Yamato-City for instance is designed to enable different systems with different values and priorities to interchange among each other by using integrated payment systems. Grassroot initiatives of a similar ilk are now arising in cities like Sanjo-city in Nigate Prefecture. Likewise, the Hyper-Institute of Oita Prefecture in Kyushu is now in the process of gathering different grass-root groups to help them design a complementary currency approach whereby they can each keep their identity, while still being able to interchange among systems.

VIII. WHY JAPAN?

One of too many prejudices about Japan is that it is great at copying, but not at innovating. Its innovations in complementary currencies clearly negate this view. But why is such a remarkably fast and diversified complementary currency movement happening in Japan of all places?

Japan hit an economic wall in 1990 initially triggered by a real-estate crash, and the subsequent recession has now been dragging on for some 14 years without relenting. This is much longer than the Great Depression lasted in the US in the 1930s. Furthermore, the total wealth that was lost in Japan during the period of 1990-95 is at total of \$10 Trillion mainly through real estate and stock market losses. This represents two years of the Japanese GDP of the time, and is equivalent to the entire losses incurred by Japan during WW2!

Until roughly 1995, most people just believed what they were told - that things would get better after a few years of tough times, as in any other business cycle. All the conventional solutions for re-launching the economy have been tried: very low interest rates (even down to zero), investment tax breaks, Keynesian stimuli through public works, etc. All efforts by the national government have miserably failed, including a desperate attempt at re-launching consumption through a coupon system.^{vii} Gradually

more and more people in both government and grass-roots circles are willing to look at less conventional solutions. And it is in this context that we should look at the remarkable blossoming of complementary currencies in Japan in the recent past.

As John Naisbit pointed out: “Change occurs when there is a confluence of both changing values and economic necessity, not before.” (Naisbit, 1982: 183). In the case of complementary currencies, the changing values are to reinvigorate the spirit of community, and the economic need manifests as rising unemployment, growing social problems and growing despair from an unending recession. One should add that their emergence is also technically greatly facilitated by cheap decentralized data processing, and their spread helped by Internet communications.

The field of complementary currencies today can be compared to Wright Brothers’ aeronautics. It may be a miracle that these experiments fly, but they have proven that flying is possible. Therefore experimenting with many different models to find out what works best in what circumstances is the wisest approach. It is too early yet to believe that any one model is *the* one. We would expect that over the next five to ten years, a consensus will start to develop in Japan around half a dozen different models, each of them perfectly suited for some given socio-economic niche. And we would then suddenly see several thousand of those selected systems being generalized all over Japan. Furthermore, several of these systems would interconnect into a rich complementary currency eco-system around the country, some of them networking outside of Japan (Uesugi, 2003). For people who are monitoring Japan mainly through what is happening at the central governmental level in Tokyo, this will then be discovered as one of those sudden and radical policy shifts that transforms Japan. But the underlying germination process of the different schools of complementary currency systems described in this paper provides already inklings today of what that future will look like.

Some Japanese quite consciously, others unconsciously, are therefore doing exactly the right thing at this time: experimenting with as many different approaches as possible. And duly noting what works best for what purposes...

IX Relevance for the Rest of the World

What is the relevance of the Japanese experience for the rest of the world? Japan is not dealing with a “Japanese crisis” as is typically described in the Western media, but rather with a structural world crisis that chronologically happens to have first hit Japan. In other words, the over-hyped “Information Age” or “Knowledge Age” also has as underbelly the “end of the Industrial Age”. The opening of China - which is now sucking in the bulk of the new investments in plant and equipment in Asia - has simply accelerated and made obvious a trend that was unavoidable anyway. The last time that a shift of such a magnitude occurred was when the Industrial Age precipitated the end of the Agrarian Age. Such shifts are not painless: remember what happened to the farmers when the agrarian age was ending; or the landed gentry that saw their values, power and traditions fade into irrelevancy.

If this interpretation is valid, then the rest of the “industrialized world” better take notice. Europe has been expecting to re-launch its economy for a decade, without much success: unemployment there is stubbornly stuck at its highest level in the post-war period. The classical European recipe has been to do “a little more like the US” and hope that everything will return into normal gear. But after the US itself has seen the bursting of its own high tech bubble, those hopes look rather vain. Slowly Europeans are nowadays waking up that what happened in Japan may also happen in Germany and other parts of Europe. The specter of deflation – a systemic sign of overcapacity across the board – is now for the first time considered a serious possibility outside of Japan^{viii}.

We can expect the US to follow a similar path of denial particularly in an election year, repeating the mantra that the Japanese have heard for fourteen years: “next year, the economy will be back to normal.” It is under this light that what is going on in Japan in the domain of complementary currencies is relevant for the rest of the world. The second largest economy of the world has turned itself into a real-life laboratory for resolving a variety of economic and social problems from the bottom up, thanks to monetary innovations. Can the rest of the world afford *not* to learn from those experiments?

ⁱ Mizushima stated later in her *Newsletter of the Volunteer Labor Bank* (No.51, 25 September 1992) that Kanema was originally a member of Mizushima’s organization.

ⁱⁱ The Kobe organization was nevertheless considering ending its operations in 1991, paradoxically because they didn’t know how to deal legally with the accumulation of Yen in the organization. At that time, there was no legal structure in Japan for Non-profit organizations (the legislation for NPO’s was adopted in Japan only in 1998!). Mitsuya Ichien found the solution to this dilemma by networking the different local systems into a small scale clearing system.

ⁱⁱⁱ See www.ecomoney.net (in Japanese)

^{iv} Based on an interview in Oita in May 2003 with Mr. Eiichi Morino, with additional documentation provided in English on the website of Mr. Robert Mittelstaedt (www.home.debitel.net/user/RMittelstaedt/Money/watto-e.htm) and in Japanese on www.watsystems.net

^v During a long banking strike in Ireland, the cheques issued by the Guinness brewery became similarly a widely accepted means of payment.

^{vi} This charcoal model is a reincarnation of the Wara system in Germany in the 1920s, which was initiated by Mr. Hebecker from Schwanenkirchen, and was backed by coal. See Lietaer B. (2000 and 2004)

^{vii} In March 1999 about 25% of the population received coupons worth 20,000 Yen (roughly \$200 at that time) that would expire within six months. The coupons were indeed used, but the recipients simply spent proportionally less in subsequent months. See Masahiro Hoti et al (April 2002).

^{viii} See for Europe: Ed Crooks “Think Tank in grim warning on deflation” *Financial Times* May 22, 2003 pg 4. For the US, Alan Greenspan, chairman of the Federal Reserve, acknowledged the threat of deflation for the first time in May 2003: “The [deflation threat] is significantly large that it requires close scrutiny and maybe, maybe, action on the part of the central bank... The Fed has so little experience in dealing with deflation that the possibility of it occurring required close monitoring... We’ve put significant resources into trying to understand... what this phenomenon is all about” *Financial Times* May 22, 2003 pg 1. “Deflation: hear that hissing sound” *The Economist* May 17, 2003 page 83 and its editorial on “The Joy of Inflation” pg 11.

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