On LETS

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1. LETS as NAM's principle

"Local Exchange Trading System" (LETS) is a local currency originated by Michael Linton in Canada. It is a multilateral settlement system, in which each participant will open his or her account and trade goods and services spontaneously on an over-the-counter basis through change in account balance. There are many other kinds of local currencies than LETS. More than three thousand local currencies have been reportedly introduced all over the world and more than one hundred in Japan.

LETS has some of the properties similar to those found in "money" or "credit." Endowed with the properties found in such money as national currencies, it functions as a "means of circulation" to mediate exchange, as a "measure of value" to provide the standard for exchange, as a "means of payment" to allow multilateral settlement, and as a "means of hoarding" to store values. It is a unique currency, on the other hand, which will bear no interest and prevent spillover of capital from local areas as well as credit creation in a modern banking system, whereby it will not turn into "money in *perpetuum mobile*" (Boisguillebert) –– i.e. capital. However, LETS is not just an economic medium; it is also a social, ethical, and even cultural medium. While LETS has economic purposes such as stimulation of local economy, establishment of cyclic economy, and prevention of bubbly expansion as well as capital accumulation, it also has social, ethical, and cultural purposes: to rebuild cooperative and mutual-help human relations based upon the idea of reciprocal exchange, to bring about trust in region and community, to share values and interests, and to encourage interaction as well as communication. Thus, in LETS, the economic, the social, the ethical, and the cultural are closely interrelated, which itself embodies the principle of the new economic society. LETS is a medium of "intercourse" (*Verkehr*), or a communication medium, to expand the domain of freedom and rebuild a new space for cooperatives based upon modern liberalism and individualism.

For social movements like the New Associationist Movement (NAM), an "exscendent" movement that aims to create a non-capitalist market society, LETS is an indispensable precondition. Any movement seeking to supersede (*aufheben*) capital and state must be developed by means of not only economic, but also social, ethical, and cultural principles. LETS provides a pivotal means for such principles. Karl Polanyi insisted that the dis-embedded market economy in the capitalist economy must be "re-embedded" within societies. But that risks a return to the pre-capitalistic society that presumes communal reciprocity. LETS does not restore reciprocal communality; rather, it is a counter-medium that exscends both capital and state by embedding society within the form of economic exchange. While it basically carries on the kinds of associationism advocated by Owen and Proudhon, LETS will overcome their shortcomings and enable us to redevelop them in the contemporary context.

Many people who are implementing local currencies in Japan believe that the economic side and the ethical side of local currency contradict each other. They insist that local currency should be used to stimulate the trade of non-market services such as welfare, healthcare, and voluntary assistance, but not for the trade of goods and services which are currently traded in ordinary markets. In short, they try to confine the scope of LETS to the ethical sphere. They argue that if local currencies were used for the goods and services being traded in ordinary markets, it would cause competition between the trades in local currencies and the profit-making activities conducted with national currency and bring about friction or confusion, whereby the informal reciprocal relations created by local currencies would be impaired. We do not share this view, however. Even if local currencies have not yet revealed their economic power thus far, we should not limit their potential in accordance with current conditions. Rather, we should fully recognize the latent potential of local currencies and seek ways of realizing that potential. Local currencies, particularly LETS, could act as a "counter-cancer" that transforms capitalist economy from within precisely because they are endowed with dual properties, i.e., the economic and the ethical. Capitalist economy is a complete automatic economic system driven by the perpetual self-valorization that is capital; the economic motivations of human beings existing within such a system are totally defined by the principle of profit. Therefore, the organized attempt to overcome capitalist economy must be supported by ethical motivations that transcend economic utility. However, in the absence of economic principles, such a movement would be powerless and unsustainable. Moreover, the idea of not using local currencies for goods and services being traded in the ordinary market tries to circumvent the problems of income tax associated with local currencies. It would consequently force citizen volunteers to assume responsibility for the domains of welfare and healthcare, that can no longer be provided for by the state's social security policy. The movement of NAM, which resists both capital and state, cannot settle for circumventing conflicts with state or supplementing state functions: we must go beyond the welfare state, which redistributes income and provides social security based upon social democracy. To this end, we must gradually expand the domain of a non-capitalist economy which stands on a principle distinct from that of capitalist economy.

2. The Contemporary Implications of Local Currency

Local currency, or "community currency," is a medium of exchange that circulates only within a particular area or a community, mediates exchanges between goods, service, and volunteers, and bears no interest.

Each local currency has the following common purposes: (1) to aim at a reciprocal exchange on the basis of trust; (2) to resolve inflation and unemployment by establishing autonomous growth of regional economy through circulation of local currency within a specific region; (3) to prevent credit creation, speculation, and monopolistic accumulation of capital by zero or negative interests in order to stimulate trading of goods and services; (4) to provide structures to evaluate non-market services such as welfare, care and relief volunteer from various viewpoints in order to stimulate these activities; (5) to provide ideas and frameworks to horizontally link between various activities of non-governmental organizations (NGO) and non-profit organizations (NPO) related to labor, consumption, welfare, and environment; (6) not simply to provide relief and security to people but to build up relations of trust and cooperation between them and to stimulate and enrich communications, which have been reduced to the single dimension of monetary exchange.

As such, modern local currency finds its purpose not only in the stimulation of economy but also in the stimulation of communications. The globalization of market economy has resulted in the dominance of monetary value and the decline of the communicative power of people. Local currency may be able to stop this tendency by serving as a medium for multidimensional and open communications. Local currency can do much more than simply communicate a monolithic economic value of goods and services; the medium in itself can communicate "standard platform"-type universal messages or ideas, such as freedom and responsibility, zero interest, co-ownership, and information disclosure. Selling and buying by means of local currency resembles linguistic communications in the sense that it conveys messages. In real, physical communities like towns and villages, each local currency can express the particularity and individuality of its locale by means of the currency's name and the relationships between those who use it. For example, with local currencies in Japan, people have adopted currency names that represent each locale's characteristics and ideas: the "*ômi*" of the Communication Supporting Center of Kusatsu, Shiga Prefecture, is named after a nearby place, the "peanuts" of a Chiba NPO, the Community Supporting Center of Chiba, takes its name from a local product, and the "*fôre*" of the Town of Shimokawa in Kamikawa, Hokkaido, is named after the local foresting business. Furthermore, local currency can also be formed within "virtual (or semantic) communities" that express a particular interest, value, or thought: for example, if "ecology money" is used for preservation of the natural environment and ecosystems and "volunteer money" for the purpose of service and help, they are shared as a specific message among participants and add to the universal message which belong to local currency in general. In this way, monetary exchange by means of local currency comes closer to achieving the aims of linguistic communications. Needless to say, these communities are not closed but rather open communities of independent individuals who are loosely connected by localities of place or common theme.

Even if local currencies can be both an economic medium and a cultural medium for communicating values, culture, and thoughts, it goes without saying that they can hardly attain the complexity of linguistic worlds. However, if numerous and various local currencies can be established, people who have lost the power of linguistic communications could belong to multiple currencies of their own choice. This in turn could provide them with a key to self-expression, which has been foreclosed by the monolithic growth of monetary exchange. By thus supplementing atrophied linguistic communications, local currency could suggest a way of overcoming—instead of circumventing-- the difficulty of "understanding" others.

However, local currencies are varied in the time and place of their establishment, in their purposes and ideas, and in the details of their structures and systems. Chart 1 below compares and contrasts national currencies with local currencies of several types. Among local currencies, there are (1) the "concentrated issue" type like Ithaca HOURS, WIR, and RGT, in which managers or committees issue their bills, and (2) the "dispersive issue" type, or "mutual credit" type, like LETS and Time Dollars, for which managers only record income and outcome in the accounts of both the seller and the buyer in notebooks, and the buyer voluntarily issues currencies. We can also classify them into those that link currency value to labor time (Time Dollars), those that are linked to national currencies (WIR, LETS, and Toronto Dollars), and those that are linked to both above (Ithaca HOURS and LETS), etc. These systematic differences can lead to differences in their actual possibilities.

（Chart 1）A Comparison between Several Different Local Currencies

	National Currency	Ithaca HOURS	Toronto Dollar	Time Dollar	LETS (LETSystem)	WIR
Location, Year, Number of Participating Gro	Each nation-state, or economic community (EU), floating exchange rate system	Ithaca (*pop.* 27,000), NY, USA, sixty groups of USA and Canada as of 1991	Toronto (*pop.* 4 million), Canada, 1998	USA, 1986, 200 groups of 50,000 participants in USA; 320 groups in Canada, France, and Japan ("fureai kippu" [Intimacy Tickets])	Comox Valley, Vancouver Island, Canada,1983. 2,000 locales mainly in advanced countries. The same as SEL (France) and Tauschringe	Türich, Switzerland, 1934. 80,000 participants, volume of dealings: 2 billion dollars per year

ups					n (Germany)	
Unit	Dollar, Euro, Yen, etc. (Dollar is the international standard money.)	1 Ithaca HOUR =1 hour of labor=10 dollars; five bills of 2, 1, 1/2, 1/4, 1/8 Hours	1 Toronto dollar=1 Canada dollar; four bills of 20, 10, 5, 1 dollars	Hours of labor	1 green dollar=1 Canada dollar	1 WIR=1 Swiss franc
Issuing System	Central bank (nonconvertible note) and Private banks (credit creation)	Concentrated issue (bills)	Concentrated issue (bills); the same printing technology as Canada dollar; there is a term of expiration	Autonomous dispersive issue (bankbook system)	Autonomous dispersive issue (bankbook system)	Concentrated issue (bills) + Autonomous dispersive issue
Interest, price, co-use	Interest for bonds and deposit money, credit creation allowed	No Interest, committee controls money supply, combined use with national currency	10% contribution to community business foundations at time of exchange from Canada dollar to Toronto dollar	No interest; currency value fixed by a particular time; cannot be used along with national currency	No interest; price can be freely determined; combined use with national currency	Loan with low interests available; bills used at the time of mutual credit settlement; assumed combined use with national currency
Characteristics	The core of market economy; investment; recession and unemploy	Similar to Owen's "Labor Notes"; realizes equality especially for low-income	Possible to use at 120 locations including supermarkets and restauran	Used in services like welfare and volunteer activities	Most widely used local currency in advanced countries; convenient and can be used for	Oldest and largest local currency system in the world; 76,000

	ment; environmental problems	workers; 400 participants including mainly coops and other food merchants and drugstores	ts, doctors, and lawyers; a commercial bank, CIBC, takes care of exchanges; business participants can convert to Canadian dollars at the rate of 90%		various purposes; there is an IC card type	companies (17% of all Swiss companies) participate; POS, or electronic settlement, used

3. History of local currencies

Local currency is not a completely new idea or movement. Early precedents and prototypes can be widely found in pre-capitalist human history. In Japan, for example, its characteristic of mutual-help can be found in traditional practices that still partially exist today, such as "*yui*" (mutual help conducted in villages during busy periods) or "*ko*" (mutual loans administered from a shared reserve fund). These are pre-modern systems implemented almost forcibly in closed communities.

The origin of modern local currency should be found in Robert Owen's "labor notes." Local currency arose almost simultaneously with the industrial capitalism established in the wake of the industrial revolution. This shows that local currency was born as a community's counter-movement against capitalism, or what Polanyi calls "community self-defense." Moreover, the local currency that emerged within modern civil society has already traversed the ground of individualism and liberalism. It is a movement that takes individual autonomy and ethics as the basis for its pursuit of mutual help and cooperation.

Although Owen succeeded in the management of cotton spinners in New Lanark by introducing cooperative principle in management, rational labor management, education of juvenile labor, and coupons to be used at factory stores, his attempt to build a cooperative village in New Harmony, Indiana in the United States ended in failure. After returning to London, Owen established the "Equitable Labour Exchange" and experimented with "labor notes" in September 1832. "Labor notes" are bills imprinted with the labor time expended on products. Workers would receive "labor notes" at the "Labour Exchange" in exchange for their products, whereby they could purchase other products of the same value. A labor note of 6 pence was regarded as equivalent to 1 hour of labor, and a fee of 8.33 per cent was charged on every transaction in order to cover the operational costs of the Exchange. The experiment, based upon the labor theory of value, sought an equitable exchange of products. But the computation of value in products on the basis of average labor time was unable to properly appraise values for heterogeneous labor or complex labor (skills and proficiency), causing an inequality among products. As a result, the Labour Exchange was unable to adjust the supply and demand of necessary goods. Merchants' speculative trades also made its operation difficult to sustain. The example of Owen's "labor notes" clearly demonstrates the fundamental problems behind the idea of directly using labor time as a basis for equitable exchange. Today, there are still local currencies which adopt labor time as a measure. It should be noted, however, that Time Dollar is mainly used for volunteer exchange and that Ithaca HOURS is linked to the national currency in order to raise the minimum wage level in the region (1 Ithaca HOURS = 1 working hour = $10). It should be said that most local currencies today are not based upon labor time.

Pierre-Joseph Proudhon denied collective authority such as state and parliament from the vantage of anarchism, insisting that an economic system be innovated by replacing the state with associations of independent producers. In 1849, based upon his "principle of mutual credit," Proudhon proposed to establish the "Exchange Bank" as an "institution for circulation and credit" in order to correct the inequality of exchange. According to his plan, workers would become members of a commercial union called "National Exchange Bank." The bank required no investment, so they could mutually exchange their products both as producers and consumers for equitable prices computed on the basis of labor time and production expense. The National Exchange Bank would determine prices of products, take care of product trades, and issue four kinds of exchange vouchers in exchange for products. Thus, the "Exchange Bank" plan was an attempt to implement Owen's Labour Exchange on a larger scale. However, Proudhon's proposal was rejected by the assembly and not put into practice. Proudhon argued that all the products in a modern society are the results of an "ensemble" based upon workers' division of labor and cooperation; capitalists deprived workers of products and appropriated them to without compensation; therefore, it was unjust theft. While attacking private ownership from this perspective, Proudhon also criticized the "national workshops" proposed by communists like Louis Blanc, insisting that they were state monopolies of property. Although Proudhon's idea of associationism and critique of state authoritarianism were correct, there is a fundamental problem with his idea that equitable exchange could be achieved on the basis of the "constitutive value" of time and cost, which regards money as a "symbolic representation of labor" and abolishes the sovereignty of money. Despite his denial of such collective authorities as state, as long as his proposed Exchange Bank serves as the equitable price fixer, in effect the bank becomes the planner and executor of collective economic planning. Consequently, this would result in a denial of market and repression of freedom. In this respect, there is a self-contradiction in Proudhon's proposal. We should refuse his conception of money as an indispensable medium for free over-the-counter trades for producers, but we should also reject his collective system, which inevitably requires rational money issuers, a price fixer, and a planner and executor. As we will show, LETS is precisely the system that both inherits the basic principle of Owen and Proudhon and is capable of overcoming their weaknesses.

During the 1930s after the Great Depression, complementary currencies arose in many parts of the world to supplement the shortage of national currencies. In the first half of the 1930s, local currencies were introduced as a catalyst for intra-regional trade in many communities of Denmark, France, Italy, Austria, Switzerland, Canada, and the United States. Many of them were based upon "stamped-money" proposed by Silvio Gesell at the end of nineteenth century, to which Keynes paid attention in his *General Theory of Employment, Investment, and Money*. Gesell, originally from Germany, succeeded as an entrepreneur in Argentina and wrote on free money in later years. "Stamped-money" needs to have a stamp (deed) of a certain amount pasted on it every week or month. It is not valid without stamps. Its value will depreciate as time passes. Such a minus interest on money was intended to prevent hoarding, to encourage circulation of money, and to stimulate consumption expenditure.

The municipal body of Wörgl, Austria, for example, issued stamped-money for the payment of public enterprise, which would depreciate 1 per cent of its value per month, as a policy measure to solve unemployment. The unemployed who received wages in the form of stamped-money spent the money at participating stores, and those stores paid tax with it, whereby the circulation speed of the money was accelerated by 5 to 6 times. As a result, the employment rate went down and shopping districts became active. But the National Bank of Austria took a counter-measure to prevent the use of the money, leading the experiment to suffer a setback. In the early 1930s, communities and chambers of commerce in many parts of the United States such as Chicago issued coupons called "federal dollars," which at one point were circulating at more than three times the speed of the national currency. However, this currency gradually declined with the implementation of the New Deal and was finally abolished in 1943 due to the wartime supply shortage. Whereas the experiments by Owen and Proudhon in the 1830s and 1840s did not experience state intervention, since the central bank had not yet been founded, the bill-type local currencies of the 1930s had their potentials deprived by the state's control over money and economy. Thus, local currency movements had been stagnant until the 1990s.

Depreciating currency, which urges people not to store money, thus encouraging consumption, is likely to succeed in relatively small towns and villages. If we attempt to introduce depreciating currency on a national scale, as Gesell planned, however, a legal tender with legal force must be depreciated, which requires reliance on state power. At any rate, it requires compulsion from above and presupposes the presence of authority. Therefore, depreciating currency, if introduced on a large scale, could also bring about "compulsory consumption," urging people to consume even what they do not want. This threatens to deprive people who do not pursue economic growth of the "freedom of not consuming." Moreover, it could easily encourage the kind of mass-production, mass-consumption, and massscrapping that are often criticized today. As in the case of Proudhon, there is a self-contradiction in Gesell's depreciating currency in the sense that, despite its positive characteristic as an economic catalyst, it requires state power and has an anti-ecological dimension.

The only local currency that originated in 1930s and still survives today is WIR. WIR is the cooperative exchange ring organized in 1934 by medium- and small-sized entrepreneurs and store keepers in Zurich based upon Gesell's theory of free money, and many workers took part in the effort. Founded in 1936, its banking institution, the WIR Bank, has the power to create credit. The bank provided WIR with both dispersive and concentrated issue systems. 1 WIR has been set equal to 1 Swiss Franc. Today, 76,000 firms and stores, including manufacturing firms, hotels, and restaurants, participate in WIR, accounting for 17 per cent of the total number of firms in the country. Inter-firm transactions are also settled in WIR. Pricing of goods and services must be expressed as a combination of WIR and Swiss Franc, because salary and international transactions must be in Swiss Franc and because the federal government and municipalities worried about decreases in tax revenues. Commodity prices are indicated in the following manner: "1,000 Swiss Franc, payable by WIR up to 50 %." WIR has survived until today probably because it started as a bankbook-type local currency with no printed paper, by which it could evade state intervention, and because it evolved itself into a banking institution.

The most prevalent local currency today is LETS. LETS, originated in Canada during the recession of 1983 just like other local currencies, has rapidly spread into such countries as England, France, Netherlands, Germany, the United States, Australia, and New Zealand. LETS is a type of local currency that takes the form of changes in account balance. This type of local currency is called "Tauschringen" in Germany and "SEL" in France. People in developing countries such as Thailand, Mexico, South Africa, and Senegal have also begun to experiment with LETS. It is now estimated that LETS is currently being used in more than 2,000 regions worldwide.

The largest scale local currency in the world is La Red Global del Trueque (RGT) in Argentina, with more than 500,000 thousand people participating. The first exchange ring in Argentina was born in Bernal in the suburb of Buenos Aires in April, 1995. As of the end of 1997, there were

500 exchange rings nationwide, which cooperate to form a national network. After the currency crisis, Argentina followed IMF's advice and pegged its legal tender, the Peso, to the U.S. dollar. Although the measure succeeded in preventing the Peso's value from collapsing, the accompanying deflationary pressure led the domestic unemployment rate to exceed 20 per cent. Such economic turmoil was the backdrop for the rapid spread of RGT.

Most local currencies of the last century, as we have seen, arose during recession periods. All of them attempted to build a reciprocal exchange system denying interest, to create employment opportunities for the unemployed, and to stimulate intra-regional trades of goods and services. Unlike comprehensive economic planning from above, this movement was initiated from daily practices by a few and has been spontaneously organized along with the growth of participants' networks. Each local currency has its own unique name, devices, and improvements. Such uniqueness and diversity in each local currency have never died out.

Since the first half of the 1990s, local currencies have continued to grow all over the world, reviving after 60 years since the early 1930s. These periods have a particular economic condition in common –– recession. There is also a key difference, however: while planning and control over the economy were common themes of the 1930s, we are now in a period of globalization that drives toward the universalization and liberalization of markets. In the 1990s, authoritarianism seen in the collective economic planning of Soviet socialism or Keynesian macro demand management retreated, while the market economy covered the entire globe. Nationally, deregulation and privatization of fiscal and public policies were promoted, while trade and investment were liberalized internationally. Today, we see social democracy reviving in Europe, where currencies and markets were integrated as the EU. But this simply constructs a pan-European fortress to protect against globalization, while affirming globalization itself; it is not something that can stop capital's globalizing movement toward "free investment," which goes beyond "free trade." If such is the case, then the tendency toward further expansion and penetration of markets will continue well into this century.

Motivated by a hatred of money, the state socialism and totalitarianism of the twentieth century were attempts to abolish money and control economy; however, all of these attempts failed. It is obvious now that there is no possibility of eradicating anarchism through collective planning or constructivism. Furthermore, the social democratic welfare state, which focuses on redistribution, is nothing more than a soft form of such attempts and cannot fundamentally address the problem. Also, the currency crises observed in Asia, South America, and Russia in 1997-98 as well as the financial crisis in Japan clearly indicated the problems inherent in financial capital like hedge funds, which invite the repeated formation and bursting of financial bubbles. If we can neither abolish nor abandon money, then we have no choice but to preserve the positive inherent in money, while abolishing its negative –– in other words, the supersession of money itself. To this end, we must transform the total characteristics of market and societies and prevent capital's globalization by introducing local currencies which are a de-fetishized medium of exchange.

4. The Potential Significance of LETS

According to Marx, market (commodity economy) begins between communities, and in the process of reflecting and penetrating the interiors of those communities, gradually dissolves them and replaces them with commodity relations. Springing from industrial capital, the capitalist economy is established at the point when any and all products become tradable on the market through the impetus of the commodification of labor. Among "commodities," there are primary commodities such as manufactured goods, and fictitious commodities such as labor power. To the latter category, Polanyi added land and money to labor power, and thereby drew a comparison between cancer and the characteristics of market –– i.e. penetration into communities and multiplication within them. Economic globalization is expanding and deepening, and now that the cancer has spread into the body called the world economy, we can no longer cure it by means of a surgical operation like violence revolution. If so, does that mean that it is impossible to overcome capitalism any more? Not necessarily. The creation of a new "counter-cancer," which has the power to penetrate, spread, and self-multiply like a cancer, yet cannot be eradicated because it has genetic properties that are not easily identified as a cancer, must be able to gradually transform the body from within and change its overall characteristics by means of the self-proliferation that the program will bring about. It is through this evolutionary strategy that it becomes possible to abolish commodification of labor (human), land (nature), and money (medium of exchange) and to supersede capital and state. Of course, this does not mean the abolishment of money or market itself. Rather, the idea is to create money or market of a new form while immanently transforming the properties of conventional money and market. A “counter-cancer” of this sort would fight off the disease by stimulating the natural immune system of the body through the injection of a minute antibody.

Seen from this viewpoint, LETS stands out among the various types of local currency as especially worthy of attention. This is because LETS is particularly well-endowed with the basic properties that would enable it to function as a “counter-cancer” against capital and state. Such properties cannot be found in other local currencies; to the contrary, they can easily be assimilated into the capitalist economy by complementing or supplementing the functions of national currencies. At present, LETS is not necessarily moving in the direction of realizing its potential in this capacity, although LETS is the most prevalent and most widely implemented local currency in the world. It is not wise, however, for us to merely sit back and affirm or negate the actual movement as arm-chair critics. Rather, through careful inquiry into the essential properties of the LETS program and thinking objectively about what it could bring about in the future, we must acknowledge the quality of LETS as a “counter-cancer” in theory, and then reorganize the actual movement. This point deserves particular emphasis, because practitioners of LETS, and even the originator himself, are not yet fully aware of its potential significance, even though LETS has been spread all over the world. In order to understand the theoretical potential of LETS, it is absolutely essential for us to understand how it works and what its current conditions are.

5. What is LETS?

LETS was initiated by six members led by Michael Linton in Comox Valley, a town with a population of 6,000, in Vancouver Island, British Columbia, Canada. There are currently 450 LETS accounts in Comox Valley, 100 out of which are sometimes used; 50 of which regularly; 10 of which frequently. The total amount of monthly trading is between 2,000 and 3,000 green dollars, which could not be called very much, but this is a sufficient amount of monthly trading to cover operational costs through a handling charge of 25 cents per trade and an issuing fee of 1 dollar per sheet of detailed settlement bills, which are regularly sent out.

To begin LETS, you must first determine a “registry” and a “trustee.” The registry opens accounts for participants and manages them, records trades, and sends out records of transactions to participants every month. The trustee determines the trading fees, supervises the system, and penalizes anti-social behaviors, while collecting and exchanging information with other LETS communities and developing software systems.

The participants (1) open their own accounts starting from zero, (2) list up goods and services that they can offer, or that they want to obtain, (3) contact other participants when they find an item that they need or want in the list and negotiate over such conditions as price, (4) once a trade is established, contact the registry and ask him or her to record a minus amount of the price in the buyer’s account and a plus of the price in the seller’s account. At the time of trade, each participant can inquire a registry of the other participant’s account balances and past tradings. No interest is imposed upon the account balances and none is paid. Lastly, the administration cost for such services is paid from the participants’ accounts by internal currencies.

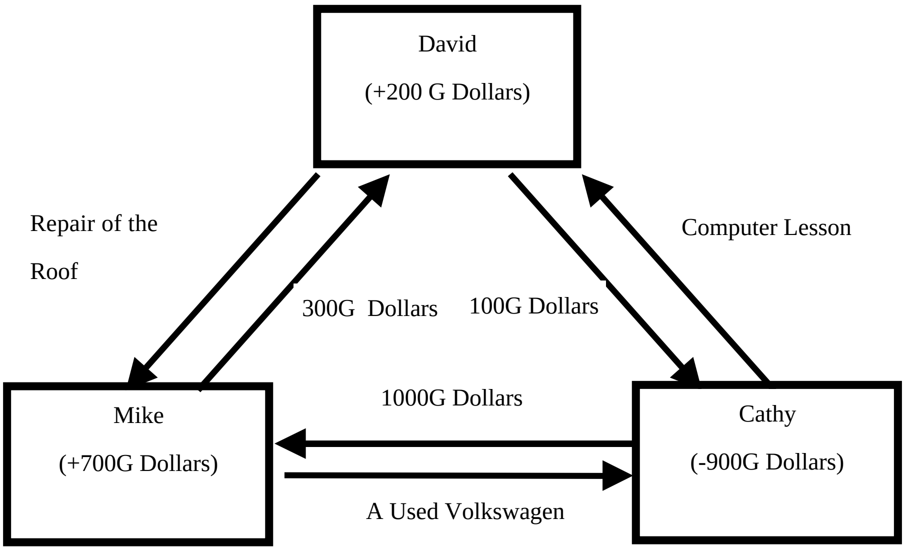
LETS is based upon each individual’s value— i.e. freedom and the responsibility that accompanies it —within a community. Therefore, LETS has four principles—“agreement,” “zero interest,” “co-ownership,” and “information disclosure.” “Agreement” means that participation in and withdrawal from a LETS is free and that all exchanges are free exchanges based upon an agreement between the participants; “zero interest” means that no interest is imposed on negative account balances or accrued by positive account balances; “co-ownership” means that one of the participants takes care of the supporting service for the LETS on a non-commercial basis, the cost of which every participant will be responsible for; and “information disclosure” means that it is guaranteed that each participant will be given complete information at the time of transaction. To these four, Linton added a fifth principle, which is the use of an internal currency unit that has the same value as the national currency. Such a LETS in particular could sometimes be called a “LETSystem.” Comox Valley, where Linton began

LETS, named their currency unit the "green dollar" and determined its exchange rate with cash, or the Canadian dollar, to be 1:1. This is for the purpose of providing a reference for valuing goods and services, and to make it possible to show, for example, a commodity's price by cash together with green dollars, as in "10 dollars (payable by green dollars up to 20%)."

Let us examine the administrative method of LETS a little more concretely. If you participate in LETS, you will be handed a plastic card with a printed text of "Comox Valley LETSystem" with green letters. The participant's name is printed on the card, which serves as the account number, or the ID#. Participants and stores receive sheets for recording, on which the date of trading, price (amount), and description of the trade are to be entered. Participants also receive a regularly issued catalogue of goods and services offered and needed. Based on this, participants make trades and periodically send a filled-out record sheet to the registry by fax or mail at set intervals. The registry will calculate and record the amount of trades and balances for each participant's account by inputting them into account management. This is the prototype for LETS. Later on, improvements were made in the areas of data input efficiency through online systems, the introduction of an automatic processing system of detailed bills of trading, and the development of printout technology and other functions; on Vancouver Island, IC cards, electronic wallets, and an electronic money version of LETS have already been implemented.

The actual exchange would take the following form. A buyer calls the administrative office and leaves a message like this: "This is David Higgins, #35. Please record a plus of 100 green dollars in the account of Ms. Cathy Macintosh, #220, as a price for a computer lesson." The registry writes this information in a record book and then enters it on a computer. As a result, Cathy receives a black of 100 green dollars and David receives a red (or "commitment") of 100 green dollars. David does not need to have 100 green dollars in his account before he pays Cathy. At the same time, Cathy can buy a used Volkswagen van, which she saw on the list, for 1,000 green dollars from Mike, if she is confident that she can expect more income from now on by teaching computer lessons. As a result, Cathy's account will have a red of 900 green dollars. Furthermore, if Mike asks David to repair his roof for 300 green dollars, as a result of these three trades, Mike's account balance will be in the black at 700 green dollars, and David's will be in the black at 200 green dollars. The amount of blacks and reds in each participant's account will change after each trade, but it should be noted that the total sum of pluses and minuses of the accounts for all participants will always be zero. (In this example, the total of the accounts of three participants is 200+(-900)+700=0.) Because of this, there will be no credit creation produced in LETS. As each participants mutually gives and shares reds, they make their trades of money and services smooth. (Figure 1)

(Figure 1) An example of trading by LETS



[G Dollar=Green Dollar, Arrows of real lines indicate the flow of money and services; arrows of dotted lines indicate that of blacks in green dollars; account balances after the all transactions are indicated within parentheses.]

6. Theoretical Specifics and Significance of LETS

LETS has several features not shared by other local currencies. Even though some of its characteristics resemble those of ordinary currencies, unlike national currency or bill-type currency, LETS is not physical money. LETS is also similar to credit such as deposit money; but it is not the same. Despite similarities, LETS is neither currency nor credit per se. The technical and systematic differences between LETS, currency, and credit may seem minor, but their implications are extremely important both theoretically and in practice, because such micro differences are the key to projecting a totally different social and economic system from the capitalist market economy. The following microscopic analyses are necessary to elucidate such implications.

(1) Adoption of "dispersive issue system"—Establishing the right to issue money and equality of the right to purchase

In contrast to non-convertible paper money issued by central banks (central bank notes) and bill-type local currencies issued by an administrative committee, in LETS, each individual creates money when they record a certain amount in their accounts as red figures to buy goods and services. Instead of a "concentrated issue system," LETS adopts a "dispersive issue system." In this system each participant independently issues money as they need it, so they are not affected by the arbitrary conditions of a central bank's money supply and monetary policy or a financial institution's loan plans. This system implicitly concedes the right to issue money as a basic freedom for participating individuals. This fundamental economic human right –– which is quite distinct from the inviolability of property or freedom of contract –– secures the individual's economic independence and freedom. Thus, LETS expands the meaning of economic freedom. Each LETS account begins with a balance of zero. However, since LETS allows red balances, each individual can make purchases without possessing money beforehand. In other words, participants can enjoy the "right to purchase" equally at any given moment because they are not bound by the "monetary constraint" of how much money they actually possess in black figures. In capitalist market economy, the right to purchase is monopolized by money itself as the general equivalent; by contrast, LETS socially guarantees this right for the individual. Here money is no longer a scarce good issued and managed by a single subject; rather, it becomes a "commons," open to and shared by all individuals. Because the free issuance of money eliminates the scarcity of money, we can expect increased trading activity. Meanwhile, each participant comes to assume the responsibility for managing his or her own red balance and the ethical obligation to return the red spontaneously to the community. However, when organizations like government, firms, NGOs, NPOs, or cooperatives participate by creating their own accounts, they may not be able to control the increase in red figures solely by means of self-responsibility. Therefore, it is surely preferable to have rules that impose a certain limit on the amount of red balances, to accommodate the black (debt financing), or to establish financing by individual voting (equity financing).

(2) A Currency That Bears No Interest

LETS is a currency that does not bear positive interest (but may have minus interest). As such, it can prevent accumulation of money and the self-valorization of capital. Because zero or negative interest stimulates the use rather than the hoarding of money, the speed of currency circulation will be accelerated and both buying and selling will be encouraged. This energizes local circulation of goods and services. Moreover, zero or negative interest will transform our concept of time itself. When money bears positive interest, we attach a low value to the future by discounting future income. When the interest is zero, we attach equal value to present and future income, and when the interest is negative, future income is valued more highly than present income. Such a scenario would thus stimulate long-term projects whose benefits (income or usefulness) are realized in the distant future, such as foresting, cultural projects, academic research, and education. Because the participants are thus required to consider not only the present but also future generations, we can expect that they will naturally deal with such problems as the global environment, culture, and education.

(3) Formation of an Autonomous Dispersive Market that Builds Equal Relations between Seller and Buyer

Although LETS is an autonomous dispersive network, like conventional markets and the Internet, it constitutes a new form of market that differs from ordinary markets based on ordinary money. The LETS market is self-organized and ordered through the accumulation of the autonomous processes of individual purchases, not by collective control or holistic control. LETS trades are made between actual individuals in the over-the-counter manner (mutual consent), but they do not constitute the direct barter of goods, which requires a “double coincidence of wants” that makes trading extremely difficult to realize. On the other hand, LETS does bear some similarity to trading in ordinary markets, wherein the basic initiative is possessed by money itself. Yet in LETS, the absolute privilege of ordinary money as the equivalent form has been removed, because money has already been transformed from a scarce good into a medium that can be freely created. Therefore, the relationship between the buyer and the seller becomes more equal and flat than the asymmetrical power relationship between the relative value form (commodity) and the equivalent value form (money) described by Marx. With LETS, the "fatal leap" (*salto mortale*) from commodity to money, which is inherent in selling, is replaced by a "small leap," so to speak. This difference can be seen in the fact that not only the buyer but also the seller can take the initiative in trading -- for instance, catalogues of goods and services list both buyers' and sellers' offers. In addition, since price determinations are fundamentally entrusted to the mutual agreement of both parties to each trade, it becomes possible to price goods and services by not only referring to customary prices in the neighborhood or in the past, but also by taking into account many other values that are not simply economic. As a result, we will see more examples of "one good for many prices" in the dispersive market rather than the "one good for one price" in the concentrated market.

In LETS, as in other local currencies, volunteer activities and mutual help can be quantitatively evaluated and paid for accordingly. Considered as uncompensated acts of altruism, there are many problems with volunteer activities. From the psychological standpoint, non-reciprocal gift-giving requires a return; in addition, quite often the receiver can develop an inferiority complex and a sense of debt if he or she cannot make this return to the giver. This kind of gift-giving can also cripple economic autonomy and mental, personal independence by fostering the receiver's desire for dependency. On the other hand, the giver may also – even unconsciously -- expect to receive some kind of personal benefit from his or her act, such as psychological satisfaction or the receiver's gratitude. Thus volunteer activities frequently create unequal and non-mutual relationships between the two parties. Because this generates friction and conflict, and at times even escalates into hatred or antipathy, the relationship between the two parties can suffer irreparable damage. The acts of gift-giving, gift-returning, and mutual help can produce a strong sense of bonding or community, but they compel a sense of belonging and loyalty to a single community and impose the communal sanctions, such as exclusion and refusal of recognition, to those who do not make a return for the gift received. Furthermore, in conditions when the sense of market equivalence has permeated the consciousness, gift-giving and returning always leave both parties with a sense of inequality in both parties precisely because they are not quantitatively evaluated. We do not reject the altruism or the desire to lead a "good life" as an impossibility, but we do not believe in accepting the negative side of the coin -- in other words, the asymmetry between the two parties and the antipathy spawned by the hidden factors of selfishness and the sense of equivalence. To correct this, we should neither isolate the relationship between the parties as that of a creditor and debtor, nor should we summarily embed them into a reciprocity that is regulated by the holistic structure of the community.

As Nietzsche said, the personal sense of indebtedness and relations of responsibility and obligation are materially and economically based upon a liability relationship like that of credit to debt. If such is the case, then we must overcome the negative side of volunteer activities and mutual help by changing this relationship. LETS offers a solution to this problem by replacing the credit-debt relationship with a relationship between individuals established through multilateral settlements that are mediated by a community and expressed in terms of single-dimensional numerical figures. LETS does not directly indicate balances between individuals, but it does quantitatively indicate an individual's balance to the community by the standard of zero. In this system, the receiver of volunteer services does not have to render payment directly to the volunteers, but can make a return to anyone who belongs to the same community. As a result, the receiver does not have to feel indebted to the giver; on the contrary, it is even possible for him or her to become more independent by trying to contribute to the community as much as possible. And as long as the volunteer's act of exchange is not based upon mere selfishness, the volunteer can also doubly contribute by donating any return to a third party, showing the voluntary nature of his or her own act in the process.

Some bill-type local currencies are currently attempting to deal with voluntary assistance by having their issuing authorities distribute a set amount of local currency to senior citizens to pay for volunteer services. However, this still leaves the receivers of the services with a sense of indebtedness and dependency, and does not necessarily resolve the problems discussed above. As mentioned earlier, some local currencies like Ithaca HOURS of the United States are linked not only to a national currency but also to "labor time." But this is not a necessary condition for local currency, and it will most likely create operational difficulties for the system sooner or later. As long as exchanges are based on working hours, which ultimately promotes exchanges of equal labor time, people will lose sight of the relationship between individuals mediated by the community and the sense of lending and indebtedness to the community, while the sense of equivalence will gain prominence. One can, of course, refer to "labor time" and "labor value" in over-the-counter trades as one of the standards for fair exchange, and there is indeed such a LETS in England. However, there is no need to set up "labor time" as a basic standard for exchange with LETS.

(4) The Multilateral Settlement System of Credits and Debts for the Community

LETS not only differs from banknotes and bill-type local currencies but also from checks and bills issued by an individual (a natural person) or a juridical person. Credit currencies like checks and bills circulate among receivers and are paid back when they return to the issuer. It is at this moment that the issuer's debt is resolved and the credit currencies are eliminated. On the other hand, a private bank creates credit by issuing deposit money to lend to companies within the limit of a loan preparation rate. In this case as well, the debt is resolved and the same amount of deposit money is eliminated when the loan is returned to the bank, but there is no way to discern whether or not the money returned is the same currency created by the bank.

By contrast, the black and red figures in a LETS are incessantly created anew as flow through the process of over-the-counter trades between two participants, while they are added to the outstanding black and red figures in the two parties' accounts, thus offsetting each other. Through this chain of over-the-counter trades, the past black and red balances of all participants get "mixed up" with a newly produced black and red and gradually eliminated, which means that black and red figures are settled among participants in a multilateral manner. While a check or a bill written by an issuer will be eliminated when it reaches the original issuer (completing one circle), the black and red figures of LETS are produced by individual participants at any moment, creating numerous circles that take different paths and are gradually eliminated over various time periods. (This process looks something like an example of the above-mentioned credit creation. The difference is that in the case of credit creation, money appears and vanishes only on the banks' balance sheets at the time of repayment, and the difference in interest between loan and deposit will result in profit; whereas in LETS, money can be issued to and subtracted from anyone's account and no profit is made.) What makes this possible is that the black and red balances in LETS are not credits and debts between two account holders, as voluntary participants in a trade; rather, they are credits and debts to the local community, i.e. the collective of all participant subjects. Therefore, the black and red figures do not reflect the relationship of rights and obligations based upon contracts in accord with civil law. Rather, the red represents "a promise or a commitment by the people of the community as well as for the people." Therefore, even if it seems that an individual directly makes a contract and has a promise with another individual in an over-the-counter trade, it turns out that they are actually always indirectly related by way of the community to which they belong. For the time being, there is no positive law that defines such a relationship between an individual and a community. While each LETS can establish a rule about the maximum red balance at its own accord, the relationships between participants to a particular LETS should fundamentally be ruled by individual ethics, unless they are controlled by legal restrictions.

(5) The Principle of Collective Offset (The Zero-Sum Principle)

Each participant in LETS has an account balance in black, in red, or of zero at a particular moment in time, but the total sum of all these amounts is always zero. In a macro perspective, in other words, the financial asset of a LETS community is always zero. This "principle of collective offset" (or the zero-sum principle) is a major characteristic of LETS. Under the zero-sum principle, one cannot create credit in a plus-sum manner as in the capitalist market economy. An individual or a group can make profit momentarily and sporadically in LETS, but it is impossible for capital, which increases its value *ad infinitum*, to exist in a long term and general manner. Thus LETS eliminates the general formula of capital (M-C-M') and supersedes capitalist economy.

In theory, after a large amount of trades and exchanges, it is not impossible for both black and red balances in all LETS accounts to revert to zero. If that does occur, it would constitute nothing less than the appearance of an economic system that has no money or credit as stock even though a currency has indeed mediated many flows of economic trade. This is an "all zero" point at which all the numerous circles of reciprocal exchanges have been closed and a reciprocal exchange system has been established. At this point, the amount of each individual's income – which would equal the amount of his or her consumption – might be various and different from others, but both money and credit completely vanish since there is no longer any credit or debt (gift and its reception) to and from the community by any of the participants. Symbolically, the "all zero" point indicates that currency within a LETS only exists in a "transcendental" manner. It is also a "regulative idea" based on the desire for a money-free economy: a reference point that ethically restricts trading by individuals whose accounts have excessively large black or red balances. However, the "all zero" point can only be attained accidentally; if attained, it cannot last, even if all the participants make an effort to maintain zero balances in accord with this "regulative idea." The "all zero" point only exists as an "idea" that ordinarily cannot be attained.

According to the formula of the quantity theory of money, or MV=PY (M: money supply; V: velocity of money circulation; P: price level; Y: total net yield), the amount of monetary trade on the left-hand side (MV) always corresponds to the total nominal income on the right-hand side (PY). In other words, M, either money supply or nominal monetary balance, will be in proportion with the total nominal income, PY. In LETS, however, the sum of red balances of a whole community, which is an equivalent of the nominal monetary balance, is not in proportion with total nominal income, because blacks and reds are multilaterally settled. The relationship between them can be various depending upon the multilateral settlement relationship. This becomes particularly clear at the "all zero" point of LETS, where the nominal monetary balance equals zero in each individual account (i.e., microscopically) as well as in the whole community (i.e., macroscopically), while the total nominal income is a plus, showing that there is no relationship between them. Thus, the society of a new market economy where economic income and wealth are not necessarily related to money, or financial asset, will be attained.

(6) Trust Money and the Reputation Principle

What the zero-sum principle indicates is the simple fact that the participants in a particular LETS community support each other through credit and debt to and from the community. This happens regardless of each participant's own black or red positions and even if the positions change in the course of the time. However, as we cannot translate the whole situation of black and red balances into the relationship between individuals, it is not clear who supports whom. Because of these facts – the mutual complement between participants and the impossibility of reducing the balances to individual relations – LETS is a "trust currency" realized by commitment to the community and through trust between participants.

The bond between participants is created through trust in the community, not by direct contact between individuals. The duality of LETS – being both economic and ethical – derives from the fact that ethical elements which originated in the relationship between individual and community have already been deeply embedded in money as an economic medium. This duality is a distinctive feature immanent to the system, not a feature that is introduced from without by arbitrarily deciding what purpose—economic or ethical—the currency can be used for. This is another major characteristic of LETS that differs from other local currencies.

Because of this dimension of LETS as trust money, its participants are always forced to examine their own positions in terms of their relations to the community. This leads to the formation of an ethical awareness that one should contribute to the community, not to oneself or others as individuals. This mechanism is built in to LETS. Through this mechanism, each individual realizes his or her indispensability to the community, which enables each person to have full confidence in his or her own dignity, and also to more actively express his or her own creativity or originality in the community. Just by thinking about what one can post in the "offer" list, for example, can lead a person to not only actively develop and evolve his or her own potential, but also enable those who have lost their jobs and confidence to realize their abilities and recover self-confidence as individuals able to contribute to the community.

But to say that LETS is trust money will surely be met with the following doubts. Won't this system see the emergence of people who only accumulate reds without returning to the community? How will LETS cope with such a moral hazard? To answer these questions, we should think about two aspects—trust and reputation.

First, the trust in LETS is not created between anonymous individuals nor produced out of spontaneous bonds like local connections or blood relations. LETS adopts a membership system, which is different from bill-type local currencies that can be used by anyone. As such, we can assume that spontaneously participating individuals have agreed with its basic ideals or rules. In addition, each LETS has participants who actively agree with various themes and interests such as economic stimulation of a particular region, formation of a community, environmental protection, or feminism. LETS is formed in a thematic community that consists of individuals who deeply share a particular idea, value, and interest. We can expect that the more important the shared idea, value, and interest become for the core identity of the individuals, the stronger the level of trust in the community, as the individuals cannot easily abandon it. In short, the higher the values and ideas displayed by LETS, the firmer the bonds created in the community will become. This especially applies to social movements that assume a sharing of high ideas and values such as NAM, a social movement against capital and state. In such a community, individualistic betrayal should be checked by ethics that are based on one's own commitment to ideas and values—not by utilitarian means such as the fear of punishment.

Second, participants' behaviors are also restricted by the element of "reputation," which is evaluation by others. Information about trades between participants and their accounts is open to the public. Trades by those who accumulate red balances will be restricted by one of two factors: first, their own reputations will suffer, and second, the same lowering of reputation will be experienced by those who trade with such people in order to increase the amount of black in their accounts. It should be noted that this principle of reputation is a kind of ethical restriction that itself derives from the "regulative idea." From the standpoint of self-interest, participants may hope to continue accumulating red balances and keep on consuming, but the very principle of zero sum makes it impossible for all the participants to have red balances. If there is a participant who accumulates red on one hand, the same amount of black must be accumulated in another participant's account. And since black sums can be used without any inconvenience, the holder of the black balances has not incurred any damage by such an exchange. Moreover, if no participants create red figures, then no goods and services can be circulated and black balances, which are purchasing power, will never be produced; hence, it can be said that those who create red sums indeed contribute to the community in a sense. In short, there is a systematic nature within LETS, which does not allow all the participants to be selfish even though they all may want to be. LETS is a system wherein everybody can not be selfish even though all the members might hope to be, which is a key difference from conventional market economy: ethics is internalized not by individual moralistic emotions or conscientiousness but within the system itself. Despite its surface appearance of vulnerability, therefore, LETS is actually a flexible and strong system that would not collapse even though there might be a certain number of unintentional red balance accumulators and intentional free riders.

In the theory of "the tragedy of commons," the commons will become desolate because all the grasses will be eaten up, if all the members become selfish and leave their sheep to feed at will in the commons. This theory applies very well to the case of public goods. In principle, however, we will not see this kind of problem in LETS since all the members cannot have red balances due to the zero-sum principle. The problem arises not from the sustainability of the whole system but rather from each participant's sense of justice, or what Adam Smith calls "sympathy." Sympathy is a moral sentiment that one holds when he puts himself in someone else's shoes, not a natural sympathy like compassion and fraternity or altruistic humanity. While we repeatedly have such imaginary exchanges of positions through experiences of observing and being observed, we become able to have a moral judgment on fairness and justice from the perspective of a fair inspector. If a person has too large an amount of red in his or her balance, the distance from the point of "all zero," that is, the "variance" (=the sum of the square of each account's black or red balance), will become larger. If it goes beyond the threshold of most participants' sense of fairness, they will recognize the situation as unfair and stop trading or leave such a community. (If there is a person who has a large black balance, there would not be any sense of injustice, since they would understand that it is a result of having offered goods or services.) LETS will face a crisis at such a moment. Reputation, thus, expresses ethics for a community composed of individuals who recognizes a deviation from a regulative idea as injustice; it does not necessarily represent each individual's utility. It is certainly desirable to decide rules beforehand in order to have a standard among all the participants, since the judgment on how much red is regarded as unfair would be various, even though the sense of justice would work naturally to a certain extent. For example, we might make a rule that once his or her red balance has exceeded a designated limit, a participant cannot make a new purchase until he or she reduces the red balance by offering goods or services.

There are many ways to decide a limit for red balance—there are some cases in which the limit of red balance is the same regardless of the amount of the cumulative total trades; there are other cases in which the limit will be raised according to the total amount used for all trades. In any way, LETS can be operated in a more stable manner if we set up such rules on justice.

Thus, through the trust created by a membership system based upon values and interests, and through rules and reputation built upon the sense of justice, LETS is an attempt to share money as a "commons" even though money has itself dissolved commons, and to build up trust within that shared space.

(7) De-fetishism

LETS eliminates the fetishism of money, and the accompanying desire to hoard or accumulate, by clearly indicating that the essence of money does not lie in the physical substance of its materials such as gold, nor in its scarcity and economic value, but rather in the informational record of exchange relations. As long as bill-type local currencies take the form of paper money, or debt notes, an illusion will be generated among users that those materials (paper or bill) have value in themselves; hence, the desire to obtain and store them will not be completely eliminated. Moreover, since such local currencies are issued by third-party institutions such as administrative committees, we tend to feel that those currencies are not "what *we* own," but "what *they* created," like national currency — in other words, there is a passive consciousness that money is "given." This prevents us from arriving at an ethic of responsibility that would derive from the fact that we ourselves are involved in its creation. Further, symbols like pictures or figures printed on each piece of bill-type local currency visualize the collectivity of a community; hence, it is inevitable that sentimental or sensual characters will be attached. As we can see here, local currencies of these types rather take advantage of the fetishism of money as the source of drive, while LETS eliminates this completely. Because LETS is a "medium of exchange of the people, for the people, by the people," it most simply and clearly represents itself as a form of exchange that people create on their own. LETS is, therefore, a de-fetishized and democratic medium.

(8) The creation of a new market economy through the mixed use of national currency and LETS

LETS also uses national currency as a transitional measure. Take an example of bread made from organic wheat. Its price is indicated as "one dollar + one Green dollar." Here, the cost that must be paid in national currency, such as fuel and transportation fees, is indicated in national currency; other costs are indicated in LETS. This procedure allows producers to participate gradually in the LETS circulation sphere without excessive burdens from the start. At the beginning, LETS would attract only some portions of the agriculture and fishery sectors (primary industry), or service, information, distribution, and commerce sectors (tertiary industry). Along with extended use in these fields, however, its sphere of circulation will expand in the primary and tertiary industries and also include parts of the manufacturing sector (secondary industry) such as iron, automobiles, or computers. During this process of enclosure, LETS will also play the role of a complementary currency to national currency. But it does not stop there, as participants can gradually change their degree of involvement in accordance with individual free will. The wider the economic sphere LETS encompasses, the larger the proportion that participants can pay in LETS. By gradually encompassing mutually related processes of production in its pricing system, the circulation sphere of LETS expands while eating its way into profit-oriented businesses in ordinary markets. This gradualism is a major characteristic of LETS.

Consequently, if we can include both business and volunteer fields within the LETS circulation sphere, the boundaries between egotism and altruism and between market and non-market economies will be nullified, and a new non-capitalistic market economy will emerge. LETS is a strategy that transcends the traditional dichotomies of liberalism and communitarianism, individualism and collectivism, by aiming for an associationism that simultaneously realizes both individual independence and social cooperation.

(9) Communication Media and Non-Anonymity/Information Disclosure

Ordinary currency produces independent individuals as subjects who make choices when they buy. By securing anonymity in selling and buying, it has also established the sphere of individual privacy. In this sense, the market economy has built the foundation of liberalism and individualism. Nevertheless, the lopsided expansion of individual freedom specifically on the part of consumers and investors promoted by globalization has brought about the decline of linguistic communications.

LETS presents a solution to this problem as well. For example, in Multi-LETS (to be explained in the next section), the very meaning of choice and money possession is diversified. If each LETS forms a thematic community expressing common values, interests or philosophies, then each individual's portfolio — which LETS that individual possesses, and in what proportion — will no longer be determined solely by the view to maximizing economic value, but also by various cultural, philosophical or normative values. Because the medium of LETS is endowed with not only economic but also cultural, social and ethical properties, monetary communication through LETS comes close to linguistic communication. These two communication forms are no longer entirely separated, but rather will be compounded and integrated into a hybrid form. By changing the property of money itself, which has jeopardized linguistic communications, LETS seeks to enrich communications.

In spite of the anonymity formed by money, the proliferation of credit cards or debit cards has practically diminished the realm of individual privacy—the possession of personal information by credit companies or banks has been threatening it. If this is the case, then isn't it possible for us to selectively open up a significant part of the private realm in the public spaces of Multi-LETS? Anonymity or privacy are some of the conditions for passive freedom, yet they are not absolute conditions for freedom. LETS has often been criticized for its inability to protect privacy, because it discloses the transaction and balance data of all participants. But this is a mistaken critique, since it is completely up to the will of individuals to decide whether they will participate in one or more LETS, as well as what transactions they will engage in. Individuals can determine the degree to which they involve themselves in the diverse sphere of circulation called Multi-LETS. In LETS, information disclosure does not pose a threat to freedom. To the contrary, LETS is a system which expands the meaning and realm of freedom, and prepares a circuit that leads individuals to a multiplicity of public spaces.

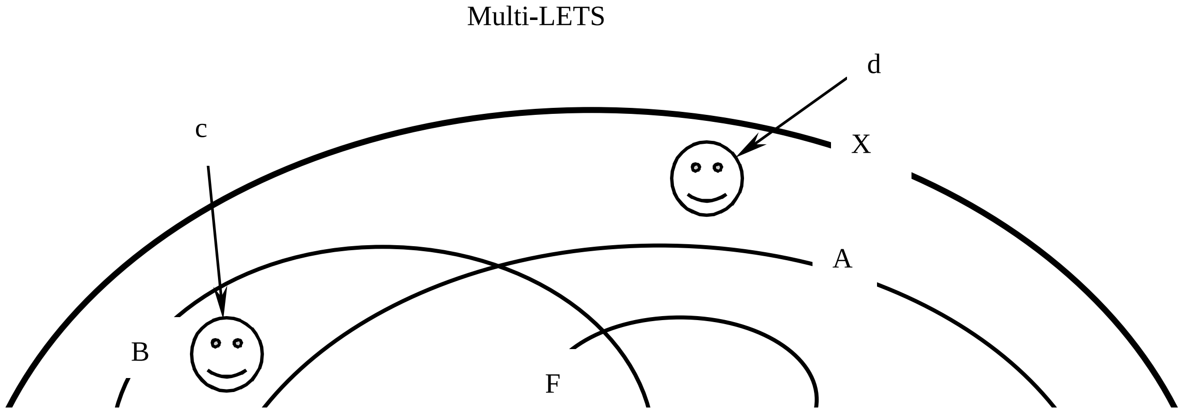
(10) The Formation of Real/Virtual Communities and Multiple Memberships for Individuals in Multi-LETS

Because of the membership system in LETS, blacks and reds circulate within the "locale" or "community" composed of all its members. This could be a "real community," a place of residences like a town or a village, but it could also be a "virtual community" formed by people who share a common value or interest. Thus defined, the LETS community is not a closed one, which only allows each participant to belong to one natural and passive commonality, as in the kinship or territorial bond. Rather, it is a topological space of proximity, to which various individuals can consciously and actively commit themselves in accordance with shared values or concerns.

There should be no rule that each individual can only belong to a single LETS. Each person is free to belong to several LETS simultaneously, as a matter of personal choice. This is called Multi-LETS. In Multi-LETS, each person can express his or her individuality by choosing to belong to one or more LETS. Any two given individuals can exchange in any LETS to which they both belong—whether that community is virtual or real. Here the meaning of the "local" is expanded from a "closed community" that enforces single membership, to an "open community" that allows multiple memberships. The meaning of "freedom" and "responsibility" has also expanded from that of consumers and investors in markets to include the freedom of choice to belong to one or more LETS, and the responsibility towards the LETS to which one belongs. Since each LETS reflects a "unique" value or interest, it forms its own space independent of the others, and these spaces are generally incommensurable with each other. Let us explain this point in more detail.

Figure 2 depicts eight LETS circulation from *A* to *G* and *X*. If each one now has a distinct circulation realm, it manifests either a real physical space or a virtual space centered around a shared interest or value. The size of the circles expresses the relative number of participants in each LETS -- a larger circle has more participants than a smaller one. In Figure 2, the one with the largest sphere of circulation is *X*, and the one with the smallest is *F*. The seven LETS from *A* to *G* each have their own centers and their spheres of circulation differ in size. While some of them partially overlap with others, they all exist on a single plane. On the other hand, *X* includes all of these LETS circulation spheres within it, so that all participants belong to it and have an account in it. This model—in which the shared plane is the platform—can be implemented by technology equipped with the basic settings of LETS, such as the Internet or IC cards. Therefore, all LETS have a basic set-up in common, although they vary in geographical spheres of circulation, value, interest, administrative methods, and/or contracts (rules such as the limit of red balance and membership restrictions).

(Figure 2)



Just as one individual might keep several bank accounts or credit cards, each of us can belong to various LETS at the same time. The types of LETS to which a person belongs expresses his or her individual character. For example, a female high school student living in Tokyo, who is interested in ecology and welfare, might participate in LETS-ecology, LETS-welfare, LETS-feminism, LETS-high school, and LETS-Tokyo. On the other hand, a festival-crazed shop owner in Sapporo's Tanuki-Koji shopping street, who is in need of part-time workers and also interested in nursing, would take part in LETS-Tanuki-Koji shopping street, LETS-festival, LETS-welfare, LETS-part-time job, LETS-Sapporo and so on.

Let us generalize these examples. The squares *a* and *b* in Figure 2 represent two individuals. Person *a* participates in LETS *A*, *D* and *X*; meanwhile, *b* participates in five LETS (*A*, *C*, *D*, *E* and *X*). The individual characteristics of *a* and *b* are expressed by the various LETS to which they belong. Both *a* and *b* belong to *A*, *D*, and *X*, while only *b* is the member of *C* and *E*. This means that they can trade with each other in *A*, *D*, or *X* LETS, but not in *C* or *E*. Thus, any two given individuals (or organizations) can trade only within LETS to which they both belong. Among these three LETS (*A*, *D*, and *X*), since the circulation sphere of *A* includes that of *D* (in other words, the circulation sphere of *A* has *D* as its partial set), the local currency of *A* covers a wider area than *D*; so does *X* in relation to *A*. Multi-LETS, which is the compound of local currencies with both real and virtual aspects, forms several layers, many of which partially overlap each other. Thus, Multi-LETS has not only multiplicity or diversity, but also multi-layeredness, which is generated not by a central power, but by spontaneous participation by individuals.

This scenario gives rise to the question of commensurability among the various LETS: i.e., can we exchange local currency *A* with local currency *D* with a certain ratio, like a foreign exchange rate. For instance, if (*A* : *D*) is (1 : 2), then it seems possible for person *a* to change the black of 100 in *A* to a black of 200 in *D*. However, this would cause a decrease of black in *A* by 100 and an increase of black in *D* by 200. This goes against the "zero-sum principle" of LETS. In order to uphold this principle, the "exchange" of local currencies should only be allowed if there are two individuals *a* and *b*, who are both members of *A* and *D*, and if they agree upon the swapping of these currencies. In this case, *a* and *b* can swap the currencies at any rate to which they have both agreed on an over-the-counter basis. Let's say *a*'s account balance is (*A*, *D*)=(+500, -200) and *b*'s is (*A*, *D*)=(-300, +200), and they agree to swap *a*'s black of 100 in *A* with *b*'s black of 200 in *D* at the exchange rate of 1 : 2. As a result, *a*'s balance will be (+400, 0) and *b*'s (-200, 0); however, the sum of both persons' balances remains the same (*A*,*D*)=(+200, 0) before and after the trade. Thus, the zero-sum principle has been maintained. If we determine that this swapping is allowed only for blacks, both persons' accounts in *A* and *D* will come closer to zero. Currency swapping will urge each LETS to come close to the "point of all-zero," forming a movement toward the "regulative idea." In fact, because there is no officially set exchange rate, *A* and *D* are not generally commensurable; but they are commensurable between two individuals (*a* and *b*). In other words, rather than having a widely transferable variable phase being shown at once, transactions between individuals discover each time the invariable phases that are only locally transferable. By not connecting different LETS with exchange markets as in the U.S. dollar's relation to the Japanese yen, Multi-LETS is able to achieve quite a unique spatial structure.

Generally, each LETS has geographically different spheres of circulation. One LETS circulation sphere can be inclusive to that of another, partially overlap with others, or even be completely independent of others. The structure of such a Multi-LETS does not take the form of a tree, but rather what Christopher Alexander calls a semi-lattice. It has not only multiplicity and variety, but also multi-layers. In other words, Multi-LETS is a multiplicity of various bodies—*rhizome*—developed on a single platform. Each LETS can maintain a distinct individuality that cannot be completely subsumed by others. Moreover, any individual who belongs to various LETS will have his or her unique position in a certain part of this Multi-LETS. In other words, by keeping a unique position in multi-layered, numerous and various circulation spaces, each individual manifests his or her singularity, which cannot be reduced to a single dimension or space.

(11) Implementing Multi-LETS by using virtual money

Although we could implement Multi-LETS in such a conventional manner as recording on bankbooks or balance sheets, it is more convenient to use electric money (virtual money), such as IC card-type or network-type.

The software to operate and administer LETS on the Internet has been already developed. LETS has, therefore, overcome the limit of physical space and can now be used in a global virtual community. In November, 2001, Q-project has launched an online network system for LETS called Worldwide Intercourse Network Development System (Winds: http://www.q-project.org/cgi/Winds/q/winds_q.cgi) that is programmed by Ippei Hozumi. "Q" is the name given to the unit of local currency on the system. Winds not only allows a server to automatically handle transaction records, account management or information publications, but also enables participants to run membership registrations, commodity listings, and trade settlements on the web. Q-project has presented a new type of LETS for "glocal" community in which any individuals and groups on the web can participate as long as they agree with the aims and rules of Q.

The great reduction in the time and trouble required for participants to record each transaction and for the registry to manage member's accounts is not the only merit of these systems. Of even greater importance is the fact that any group of people – regardless of where they each happen to live -- can now immediately launch a LETS by forming a virtual community, if only they share common values, interests or ideas. Just like mailing-lists, which connect people around the globe through e-mail, LETS connects people through local currency. Today's free mailing list creation websites, like FreeML or eGroups, enable the creation of a new mailing list in a matter of minutes. Once we can provide a free LETS creation website similar to these, in which anybody can start a new LETS simply by registering e-mail addresses, people will be able to launch and operate a new local currency without much trouble, and the number of LETS is sure to multiply radically. If we can further create a Multi-LETS network by mutually linking LETS on each server, the Multi-LETS space we have seen in the previous section can be deployed on the Internet.

In Figure 2, we depicted four participants (*a, b, c,* and *d*); but in reality, the points on the plane—individuals (or organizations)—could be limitless in numbers. According to the sets of local currencies to which they belong, each of those individuals can be described as $a \in \{A, D, X\}$, $b \in \{A, C, D, E, X\}$, $c \in \{B, X\}$, $d \in \{X\}$. It is, therefore, possible to express the account address of each person in relation to servers, as with e-mail addresses; for example, my local currency account address would be nishibe@xxx.yyy.zzz, in which "xxx.yyy.zzz" indicates the server of the LETS. If I had several LETS accounts, I would have multiple account addresses, as in nishibe@xxx1.yyy1.zzz1, nishibe@xxx2.yyy2.zzz2, nishibe@xxx3.yyy3.zzz3. In reverse, we can also portray each LETS as the set of participants, as in $A=\{x | x \in A\}=\{a, b, \ldots\}$.

Michael Linton already developed the platform for Multi-LETS and started to use it in Comox Valley and elsewhere. This system is comprised of IC cards (smart cards), electric wallets and card readers. The IC card allows us to have up to 15 different LETS accounts. The small electric wallets are used for trades between individuals or between an individual and a shop; when we insert the seller's and buyer's IC cards into the wallet, it can show the balance of each LETS account and transfer blacks between two accounts in the same LETS. The card readers are used in the same manner as credit card readers at cashier's counters. This platform allows us to pay by a mixture of ordinary currency and LETS.

Although the Internet protocol or software for Multi-LETS has not been developed yet, it is technically possible and very likely to be developed soon. After its development, Multi-LETS will spread around the world, and LETS will become a powerful influence to transform reality, as a "counter-cancer" against capital and state. The capitalist market economy has extended its sphere of activity into the Internet with electric money and e-commerce; however, from now on, the ghost of Multi-LETS will haunt the world.

NAM is an "association of associations," in which each individual belongs to various groups of region (real community), shared interest, and social class (virtual community), as well as project-teams made of spontaneous members conducting individual projects. Q-project has developed from one of these project-teams. In fact, the organization of NAM is similar to that of Multi-LETS. For the economic and ethical movement of NAM, LETS—itself an economic and ethical media—is indispensable. Multi-LETS embodies the NAM's principle of organization.

(12) Creation of Non-Capitalist Markets by LETS

LETS has the potential of creating non-capitalist markets; however, we can foresee the particular difficulties it will face as it develops. How should we deal with the individuals or organizations who try to abuse it in a capitalistic manner? Reselling of personal services is by nature impossible; and reselling of goods is unlikely to take place within a single LETS, since the transaction information will be disclosed. However, it is possible to resell information or goods bought in one LETS to another LETS. "Information," such as documents, computer programs, music, paintings, or pictures, is especially easy and inexpensive to duplicate; hence, illegal though it may be, some will attempt to gain large profits by reselling copies. "Commercial capitalist" activities –– reselling of goods or information one gets in a certain LETS to ordinary markets outside LETS –– are likely to take place. These reselling activities are permitted in ordinary markets as the freedom of commerce, yet in LETS markets, they will become the cause to prevent the expansion of LETS or to exploit the markets. In order to cope with these problems, we have to prepare the system to regulate reselling within LETS and to ordinary markets beforehand.

How is such regulation possible? We can find one idea in the General Public License (GPL), which pertains to free software—free duplication, distribution, and modification of codes. GPL delineates the contractual terms that must be agreed to for those who wish to use or modify free software. It includes a self-referential rule that requires the software used to modify free software under GPL to also be free software. We can apply this to LETS products: in other words, producers and authors establish a self-referential license for goods and services they trade in LETS.

For example, we can define the "X-LETS commodity" as any product sold in the LETS called "X" that requires 50 percent or more of its payment to be rendered in LETS. If we call products under similar conditions "LETS commodities," the rules for licensing might be determined as follows:

I) "An X-LETS commodity must continue to be an X-LETS commodity even after being sold." (The commodity bought with LETS called X should not be sold to any other LETS or national currencies.)

II) "A LETS commodity must continue to be a LETS commodity even after being sold." (The commodity bought with LETS should not be resold to national currencies.)

We call the former rule the "Particular LETS Commodity License" (PLCL) and the latter rule the "General LETS Commodity License" (GLCL). Any providers of LETS commodities can choose either of these licenses at his or her own will and should clearly state it on products when placing them on the offering list. LETS commodities with PLCL or GLCL can be resold as many times as physically possible; however, such resale is permissible only within a particular LETS market or any given LETS markets.

The idea of a license for the resale of LETS commodities is also applicable to production that uses LETS commodities. As long as we consume LETS commodities by ourselves, problems will not emerge. But when we use them for "productive consumption" – namely, as the means of production such as raw materials or tools – to create a different product to sell, there should be a license to regulate this. For example, we should apply this license when we make bread out of organic wheat purchased in LETS and sell it at 100% national currency, when we pay the workers who prepare the hall for a symposium with a local currency and charge admission fees at 10 % in LETS and 90 % in national currency, or when we modify a software bought in LETS and sell it at 40% in LETS and 60% in national currency. As the examples indicate, the license for production needs to be applied not only to products, but to personal services.

III) “Any commodity produced by means of X-LETS commodities must also be an X-LETS commodity.” (The commodities produced by using other commodities purchased by X LETS as the means of production should not be sold to LETS other than X LETS or national currencies.)

IV) “Any commodity produced by means of LETS commodities must also be a LETS commodity.” (The commodities produced by using other commodities purchased by LETS as the means of production should not be sold to national currencies.)

We call the former the Particular LETS Commodity Production License (PLCPL) and the latter the General LETS Commodity Production License (GLCPL). And let us refer to these four licenses from I) to IV) collectively as the “LETS Commodity License.” Like PLCL or GLCL above, providers of LETS commodities will choose from these licenses and clearly state them upon placing their goods or services on the offering list.

PLCPL and GLCPL are rules that will benefit from the ripple effect. For example, commodity 2 produced by using LETS commodity 1 under GLCPL also should be a LETS commodity. Then, commodity 3 produced by commodity 2 will also be a LETS commodity…., and so forth. GLCPL, therefore, infinitely spreads from upstream products to downstream products through the relation of production processes. In other words, these products produced under GLCPL will be continuously labeled as GLCPL. Similar to the free software movement that has extended its own realm by using such method, LETS will be able to expand its sphere of circulation by means of the LETS commodity license.

There might be variations in PLCL or PLCPL. For example, the rule can be applied not only to a single LETS, but also to a group of several associated LETS. This can prevent both local currency and commodities from leaking out of the group, because reselling and selling of products are permitted only within the group.

Commodities are goods and services sold in exchange for money. But if we had various kinds of monies, the “commoditiness” of those commodities would also vary depending upon which money those goods and services are commodities for -- in other words, which money those goods and services can be bought with. LETS Commodity License will provide producers and/or authors with the right to choose and decide, prior to selling, the “commoditiness” of their products after being sold as well as the "commoditiness" of commodity chains that follow their products. Copyright of contents such as books/documents and music prohibits "copying" those commodities and selling the copies to a third party, but it does not prohibit selling those contents to a third party. In sum, it prohibits selling copies to protect the interests of authors. Indeed, used books are sold at used bookstores and recycling shops. In contrast to this, LETS Commodity License protects producers and/or authors by providing them with the right to confine the sphere of circulation for their post-sale commodities or for the commodities produced with their commodities. This limits the rights of capitalists and investors by expanding the rights of producers and authors, while it does not limit the rights of the consumer. Its purpose does not lie in protection of producers and/or authors themselves; rather, it is to preserve the autonomy of the LETS of those producers and/or authors from other LETS or national currencies, to protect the non-capitalistic nature of LETS markets from capitalistic abuse, and to embody the idea of superseding capitalism by expanding LETS markets. The means that allows individuals to ethically regulate capitalistic behavior for these purposes is the LETS Commodity License.

In order for the LETS Commodity License to be effective, it is necessary to have a fair trade commission to monitor license violations and place restrictions on violators. Yet this should be distinguished from protection measures or regulations that states employ to restrict international trade. Because these licenses are presented by individuals and groups in LETS as their own right to select the "commoditiness" of their commodities. Nevertheless, it is not a utilitarian right, since it will bring no direct profit to producers or authors. Just as GPL insists on "copyleft" as freedom from monopolistic copyright, these licenses insist on the right to be free from capital and state by creating non-capitalist LETS markets. Therefore, they comprise an ethical right based upon the individual's free will pursuit of this ideal.

Here, let us apply one of the GLCPL clauses, "a commodity produced by means of LETS commodities must also be a LETS commodity," to the commodity of labor power. If labor power is reproduced by the consumption of rice or vegetables that are LETS commodities, then labor power also must be a LETS commodity; as such, its trade in ordinary markets will not be allowed. The more individuals participate in LETS markets and apply

GLCPL to their products, the less likely it is they sell themselves as commodities of labor power in ordinary markets or engage in wage labor. Individuals need either become independent producers in LETS markets and sell their products as LETS commodities or work for cooperatives or NPOs in LETS markets and receive LETS as payment. Thus commodification of labor power will be abolished by making labor power a LETS commodity.

Supersession of private properties will be realized by sharing the means of production in an association of production-consumption cooperatives. This implies the negation of the state's protection of private property. Similarly, capitalistic money will be superseded through the sharing of money. This implies the negation of the state's monopoly over the right to issue money. Sharing the means of production and money or, in other words, simultaneously realizing both association of production-consumption cooperatives and LETS, will enable the abolishment of commodified labor power and make possible the "association of free and equal people."