

NATURAL ECONOMIES, the ALTERNATIVE to MONEY

CARD-GAME SIMULATION for the COMPARISON of BARTERING, ALTERNATIVE MONEY,
CREDIT-BASED MONEY and NATURAL ECONOMIES (give-and-take)

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1. Abstract

This document shows a comparison among bartering, alternative (free) money, official money (based on credit), and natural economies (give-and-take). The comparison is based on a workshop where the different kinds of exchange are simulated by means of playing cards. This paper describes the simulation game, and some reflections by the authors, based on previous editions of the workshop.

This workshop is will be run at the degrowth-14 conference, as a special session.

2. Objectives

The purpose of the workshop is to claim that, rather than profit maximization, *the natural objective of economic activity is to find resources to realize true necessities*. Results from the simulation game, show that natural economies (asking and giving without offering or expecting anything in exchange) are the *most effective* way to reach this end.

It is important to remark that results are not “experimental”, but the four market models are *predictable* in terms of their corresponding rules.

3. Simulation of a marketplace, in four stages

3.1. Set up

The game is played with a standard deck of playing cards. We first separate groups of 4 cards with the same number, one for player. For instance, if there are three players, we take

four aces, four twos and four threes. And so on, for a total of 4 equal-number cards times the number of players.

Numbers represent necessities, whatever participants expect to get from the market. And cards represent resources, whatever participants bring to the market for sale or exchange.

Each player is then assigned one of these numbers, which represents her necessities. Cards with an ace represent the resources that satisfy the needs of player one, cards with a two represent the resources that satisfy the needs of player two, and so on.

Then, the objective of each player in the market place is to try and find the four cards that satisfy her four necessities. Player one looks for aces, player two looks for twos, and so on.

For each stage of the game (each market model), cards are shuffled and dealt, four to each player, and the exchange begins, according to the market model's rules.

Notice that, with this set up, all the available resources satisfy all the necessities, and that for each participant there exist exactly the amount of resources that they need. This is a particular setting, but it is useful to make clear the *differences* among the four models, under the same context.

3.2. First stage: bartering fair

Playing cards are shuffled and dealt, and participants enroll on a bartering fair (they exchange cards one to one). One extra rule: players can only take cards corresponding to their needs (i.e., player one can only take aces).

Bartering results in *deadlock*. At a given point, no one can exchange any more cards with anyone else, and the game gets stuck long before each person has reached their necessities. The reason is the need for the so-called *double coincidence of necessities*. I have your card, but a third person has mine.

3.3. Second stage: market with free (alternative) money

Cards are shuffled and dealt again, and 13 *ecos* (green papers) are given to each participant for free. Now, participants enroll in a market, buying and selling cards to each other. Prices are set independently at each transaction by agreement between buyer and seller. (Notice that time-exchange banks belong in this category too. Only that their currency is time-units).

Money, as text-books say, does manage to solve the problem of the double coincidence of necessities (in fact, it can be shown that just a few circulating bills would be enough to solve the dead-lock). At the end of the round, each participant has indeed collected their four cards.

But a new problem arises: *some participants end up with more money than others*. The reason for the lack of balance is that prices are arbitrary, changing and subjective.

There's no free lunch. Not everybody can make profit. If some take profit, others must take the losses!

3.4. Third stage: market with borrowed money

Cards are shuffled and dealt again. Each participant borrows 13 euros (red papers) from the bank, and at the end of the stage they have to pay 15 euros back to the bank (2 euros of interest). At the end, the bank will seize a card for each unpaid euro, as mortgage.

Sometimes, when running the workshop, by the end of the game not all necessities have been fulfilled, because some participants simply don't agree to buy or sell at the abusive prices imposed by their fellow players. As for the money, if N is the number of players, the bank will get back all the $13 \times N$ euros that it has lent, no matter how they are distributed. But the bank still requests $2 \times N$ more euros as interest. An amount of money that *never existed*, in the first place. Therefore, the bank is going to seize $2 \times N$ cards!!!

Eventually, if some player manages to make profit (that is, earn more than 15 euros), the player is going to keep the profit money, but the bank will seize some extra cards.

Then, who said that banks risked their money?

3.5. Fourth stage: natural economy fair (give-and-take)

Cards are shuffled and dealt again. Now, participants *ask* each other for the cards that they need. There are two rules:

1. Ask for the card that you need (your own number), *without offering anything in exchange*.
2. Give away the card that has been asked from you (if you have it), *without asking for anything in exchange*.

The natural economy fair takes only a few minutes to end, and everyone gets their needs with maximum effectiveness and without inequalities of any kind.

Text books don't mention this solution, because *for natural economies there is no longer a need for the double coincidence of necessities*.

We call the above rules the *give-and-take* rules (gib & nimm).

4. Discussion

After the simulation game, group discussions take place. Participants are prompted to observe the results of each stage, compare them and draw conclusions. Special emphasis is made on the natural economies model.

In the following we develop our own reflections.

4.1. Use value vs. exchange value

In the first three models, the cards that participants take from others have *use* value. And whatever they give back (other cards, ecos or euros), has *exchange* value. On the other side, in natural economy, since there is no exchange, there is no exchange value.

Thus, we could say that money is anything we take in direct exchange for what we give.

Money is anything we give in direct exchange for what we take.

Exchange is a bidirectional flow of value between two people. Instead, in natural economies, the return path for what we give comes from the group. Their potential effectiveness is 100%, in terms of the resources available to the group. As compared with bartering, when asking the group, chances to get what you need are much higher than restricting the exchange to the single person you are bartering with.

4.2. Examples and models of natural economies

Natural economies can be defined as any activity whose goal is to find resources to realize true necessities, in a straightforward way, without intermediaries or exchange value.

Nature itself is a complex system of natural economy in dynamic equilibrium. Living beings take their true needs from their environment. And they give themselves to other living beings. Nothing goes to waste.

Natural economy is not a utopia. In human societies, there are many examples of natural and care economies: family, friends, neighborhoods, squatters, eco-villages, rural communities, volunteers, boy scouts, tribes of native people, mutual-support groups, community gardens, libraries, and many other communal or sharing systems where no exchange is required.

Natural, intimate economies, have been made invisible by the dominant monetary economy of patriarchy.

There are different models of natural economies. The card simulation game is one of them. People ask each other for their needs. But they could as well have asked aloud to the

whole group. The latter case would be equivalent to a mutual-support email list, where everyone can write to ask, and others answer to give.

Or we could consider an *ask-it-forward* chain that would lead, in the end, to Nature, where everything comes for free.

In the card simulation game, every participant could also have left their initial set of cards on a table, and everyone would pick their own. This would be equivalent to a *free fair* or marketplace, where everyone brings the presents they have, and everyone takes what they need, for free.

A free-shop *eco-village* could work as follows: in the morning people would work in different activities and leave their products in specialized shops. And, in the evening they would collect what they need from the different shops, for free.

In Natural economies people ask the group and receive from the group. Natural economies are simply *sharing* systems.

4.3. Asking vs offering

If you ask a person what they need, they often say: “nothing”. But if you set before them a table with a variety of dishes of delicious food, they almost certainly will pick up one.

When you need to ask, you have to get in touch with your necessities. Offering, instead, induces choice. This is the origin of consumerism.

4.4. Moral and cultural prejudices against natural economies

There are several moral and cultural prejudices that prevent people from realizing the existence and benefits of natural economies:

Prejudice 1. There is a strong moral feeling that we have to pay back something in exchange for what we have been given. Otherwise we are in *debt*. And this exchange must be made with exactly the same person that has given something to us.

Prejudice 2. Therefore, there is a strong reluctance to give anything away for free, because we would run out of exchange value for the future.

Prejudice 3. There's another strong believe that these exchanges should be *fair*, whatever that means. This is the origin of the quantification of value.

Prejudice 4. Even within a sharing system, there is a strong belief that everybody should contribute and get roughly the same. Or, at least, that everyone should take as much as

they get. This could be called the *free-rider panic* syndrome (panic that someone could abuse, by taking without giving).

Prejudice 5. Alternative-money activists believe that people are not “ready” for natural economies yet. That a transition step is necessary in order to “build trust”.

Prejudice 6. People ignore the existence of natural economies, even if they are all around them, and they believe that donation is a utopia.

Prejudice 7. There is a strong *wrong assumption*, that bartering is the alternative to money.

4.5. Final reflections

Official money brings growth and destruction. By means of enterprise profit and bank interest, official money is used as a means to accumulate property in the hands of a few. At an exponential rate.

By inducing “happiness” with marketing strategies (selling commodities at a price that customers accept to be fair), companies get much more income than the incurred costs. A billion *fair exchanges* make the delight of such companies. This is how companies take advantage of prejudice 3.

Money forces us to quantify the value of goods. But value is not quantifiable. Value is subjective and variable, and prices are, therefore, arbitrary. No matter the currency.

As we have seen, even with alternative money, inequalities are unavoidable. And prices often mimic the official market. When a user of alternative money reaches her debt limit, she runs out of purchasing power. Even though she may have worked more than another user, but charged less for her work. Only when no limits to debt are imposed can alternative money be fair. But then it becomes, at best, unnecessary. At a smaller scale, alternative money can also lead to people being “rich” or “poor”, and it does not prevent speculation.

The main purpose of alternative money is to limit or “write down” what everyone buys and sells, so as to make sure that nobody gets more than they give (prejudice 4), thus reinforcing the prejudice that we must always give or take something in exchange (ecos in this case). From a point of view people’s attitude, then, *alternative money and natural economies move in opposite directions*.

Although alternative money is in many senses a true alternative to official money, it does not necessarily lead towards natural economy. Buying and selling in ecos, does not necessarily build trust.

When you argue with people that we should avoid money, they often say: “So, what should we do? Should we revert to bartering?” This common belief is absurd, because bartering has never been extensively used, simply because, as we have seen, it does not work. In the simulation card game, or in a true bartering fair, it is interesting to see what people do when they run out of exchanges. When they do not find anything in exchange for what they offer, there are three main attitudes: a) Some people take things that they actually don’t need. This is the origin of consumerism. b) Some people try triangular exchanges, by taking exchange value (something to exchange with a third person). This is the origin of money and, eventually, of speculation. c) Finally, some people don’t care if others cannot pay back, and they give away their items for free. This is natural economy.

In a bartering fair, though, free givers get stuck when they run out of goods, because other people still require something from them.

In natural economies there is no need for exchange, or for storage of exchange value. What you give now, you can ask the group later. Only communal storage of use value makes sense.

In natural economies the *free-rider* is harmless, because there is no obligation to give them what they ask. Asking them what they can offer should probably be the best way. Offering them the chance to contribute with what they can.

In natural economies, everyone gets according to their needs.

In natural economies, everyone contributes according to their capabilities.

Natural economies are not a model of the past or the future, not even a utopia. We run into natural economic exchanges on a daily basis, but we do not identify those situations as such. How often do we do or receive unselfish actions? Monetary economics prevents us from realizing this, and we become dependant on buying and selling.

In natural economies there is no accounting. There are plenty of examples of unbalanced relationships, like mother/children relationships. In this case, the motivation and revenue are love.

Asking and giving goes beyond materialistic exchanges. Asking builds confidence, and giving generates satisfaction. Giving and taking means building bonds within the group.

5. Conclusions

A comparison between exchange models on the one side (bartering, alternative money, and official money), and give-and-take models on the other (natural economies) has been

presented, that shows the advantages of the latter. Together with some of the prejudices that prevent us from putting it into practice.

The goal of economic activity is to find resources to realize true necessities, and natural economies are the most efficient way to achieve this end, because they don't set conditions or intermediaries. Natural economies are communal and equitable, because each person asks what they need and contributes with what they can. Asking gets us in touch with our true needs, and determines what is to be produced (what is lacking).

Natural economies exist in our daily lives, but they are not identified as such by the dominant monetary economy, which reinforces and exploits a series of prejudices based on the notion of exchange. Bartering simply does not work, economies based on money generate inequity, even with alternative money. Official money, based on credit, is completely abusive, and generates competitive and aggressive attitudes.

Our proposal then is to reclaim natural economies, by moving away from consumerism, and by enlarging those intimate spaces where natural economies already take place.

Before running to the shop, think first if you can ask someone for what you need!

Complementary documentation

- "Data distribution in computer networks". Mihail P. Stromnohov. Published in *New trends in Computing*. 1959. This is a review of computer network algorithms for routing data (resources) towards computer nodes (necessities). It shows that the most effective algorithm is to let each node inform the rest about what it needs, and let the other nodes forward the requested data to the first. Not available over the internet.
- The first 15 minutes of the movie *La belle verte* (the rest of the film is also very amusing): www.youtube.com/watch?v=BnLUfiPQMeE.
- Manfred Max Neef, *Desarrollo a escala humana, II parte*. http://www.max-neef.cl/descargas/Max_Neef-Desarrollo_a_escal_a_humana.pdf. Max-Neef settles the difference between needs, satisfactors and consumption goods, that leads to the notion that necessities are finite, while resources unlimited. A must.