

Future Structure of the Life-World

As an inevitable consequence of the «peer-to-peer»

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This article intends to draw theoretically a future structure of the life-world. The state interventionism in the late capitalism has been often argued by the critical theoreticians like Jürgen Habermas since the last half of the twentieth century. It was particularly the main problem how possible the life-world was in such the technologically systematized society. However, the highly technological development of telecommunication has changed our everyday life very rapidly and totally. If we know such the rapid change of coevolution between human life and technology, we have to fundamentally reconsider on the theory of life-world. Therefore, in this article I will firstly focus on the classical theory of mundane social world which Alfred Schutz presented in the early 1930s. Of course, his project of socio-phenomenology has been one of the most brilliant and important works still now. However, his theory also will have to be renewed. If we know particularly the «peer-to-peer» constellation of the computer network by the distributed anonymous persons, the classical model of life-world must be versioned up to a next theoretical level. Secondly, considering on the virtual currency like the Bitcoin, this article will show you a hypothetical aspect of transformation of the life-world. The mechanism of trust, which has been often understood as one of the most important key concepts for the community or the society, may be replaced with the computer technology of cryptographic proof. Such a theoretical examination will finally lead to an important opened problem. We will have to inquire whether such the social order will be spontaneous, or whether such the ordering will have to be decided only by the speed of computer's central processing unit.

1. Is the Critical Theory still possible?

In the 1970s Habermas described the critical and pathological situations of late capitalistic society as a well-known theme of the life-world colonized by the system (Habermas 1973: 9). In those days it was an alternative to the next society that he would propose with this analogical dichotomy of the «life-world» versus the «system». He assigned the very famous theoretical terms, which were presented as the symbolic media theory by Talcott Parsons, to this dichotomy. It means that the two media «money» and «political power» are matched to the «system», and the other two media «influence» and «value-commitment» are matched to the «life-world» (Habermas 1980: 96, Habermas 1982: 413). Moreover, he reconsidered a sphere of latter two media

as a problem of speech act theory, what he called the universal pragmatics (Habermas 1971: 101-141, Habermas 1984: 353-440).

Indeed, it might have been very important at that time that the industrial society and social welfare state were interpreted as one of the most typical examples of the highly integrated complex society. According to the Parsonian presupposition, the members of a nation make their living with the internalized common value for them. Their personalities are uniformly molded in the social system where they are growing up. They are strongly committed to a set of values which are known as «success», «affluence», «efficiency» etc. in the modern industrial society. Such the uniformly patterned persons in the advanced industrial society might be the most typical image of man in the Parsonian social system theory.

However, we have to point out another connotation of the term «system». The technology has been developed more highly and rapidly since the last decade of the twentieth century. The telecommunication technology, typically the Internet technology, has totally changed our everyday life. It means that our taken-for-granted valid references like some common concepts and values in a patterned culture, such as marriage, sexuality, family, has changed themselves very rapidly. The above mentioned symbolic media like money and political power also has rapidly changed themselves with such technological development. For instance, the payment device of credit card has changed the form of money and its exchange style, and the mobile phone has strongly influenced on the action pattern of our everyday life.

Now we have to ask whether the critical theory, which was possible for Habermas in the late 1970's, is still now critical against the today's highly technologically structured society. It would be very important how we could criticize the life-world colonized by money and political power, because I assume that our hyper modern society should already have been designed to be colonized by various technological media.

For this purpose we have to grasp the life-world more fundamentally, because Habermas interpreted the life-world very simply as combinations between speech acts and their background cultural resources (Habermas 1982: 182-228). Even if the life-world had already been colonized, we had to know more conceptually an original structure of the life-world, which is spatially unfolded by bodily movements and their extension, and which is temporally ordered by lived experiences and their continuity.

Therefore, we need firstly to refer to some fundamental issues on the original structure of life-world (2). Secondly we are going to reconstruct a relation between the original life-world and the symbolic media of money and political power (3). Thirdly we will examine a specificity of virtual currency and a constellation of the peer-to-peer computer network(4). Consequently we lead

to consider whether we will be able to maintain the original position of the critical theory, or whether we should newly find another theoretical way (5).

2. *Classical Structure of the Life-World*

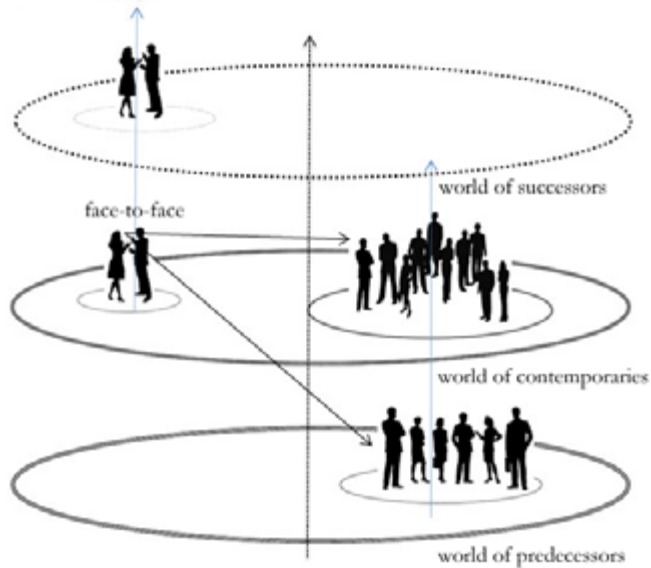
Of course, if we would ask fundamentally, it may be proper that we refer back to the original conception of life-world by Edmund Husserl. However, we have to presuppose in this paper that the life-world is mundane structured. Alfred Schutz presented the society as a composition of four social worlds, and at the same time he grasped the life-world as the difference between the problematic and that which was taken for granted. In other words, his analysis consists of two parts, firstly an analysis on the temporal differentiation of social worlds, and secondly an analysis on the spatial constitution by bodily movements and their perceivable arrangement and enlargement.

In his first book in the 1930s Schutz had already theorized the society as the four social worlds which were spatially and temporally articulated (Schütz 1932[2004]: 313-387). If we follow the English translation, they are the four social worlds: «fellow-men in direct experience», «world of contemporaries», «world of predecessors», and «world of successors» (Schutz 1967: 176-214, Schutz, Luckmann 1973: 61-92).

These articulations are based on the difference of intimacy and anonymity. It means the difference between «Thou-orientation» and «They-orientation». The «Thou-orientation» arranges spheres of the life-world, which are constituted by various immediate lived experiences of the other. It is generally known as the «face-to-face» relation. In this point the first social world «fellow-men in direct experience» means this «face-to-face» relation.

On the level of simultaneity the difference between «face-to-face» relation and «world of contemporaries» is articulated spatially. The differentiation of «world of contemporaries» and «world of predecessors», or that of «world of contemporaries» and «world of successors» will constitute a temporal axis. Such an theoretical image of articulations will be illustrated like the following picture.

As mentioned above, the difference between «Thou-orientation» and «They-orientation» corresponds to the articulation of intimacy and anonymity. It means the degree of intimacy and anonymity. These two types of density will be simultaneously distinguished in a situation. In other words a situation appears inevitably as a difference between the one sphere constituted by the address terms of «I» and «Thou», and the other sphere distinguished as that of «We» and «Others». The former sphere will be opened out with the «Thou-orientation», and the latter one will be spread out with the «They-orientation».

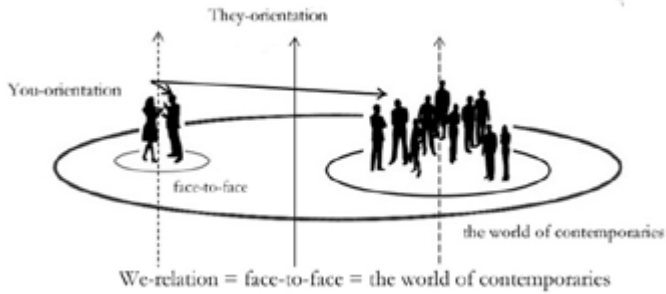


This simultaneity is supported by the dual structure of the present. It means, the present is firstly the difference between the present at the moment and the present which has passed just now, and the present is secondly the difference of the present at the moment and the present which will appear soon.

The «world of contemporaries» is spread out with the present. It includes the sphere of «fellow-men in immediate lived experience» which the «Thou-orientation» will constitute. In other words, this «world of contemporaries» is assumed to be articulated with the difference between «Thou-orientation» and «They-orientation». Of course, the «We-relation» of «fellow-men in immediate lived experience» is constituted not only by one-directed perspective of the «Thou-orientation» from ego but also through the reciprocal «face-to-face» contingency of ego-alter perspectives. Moreover, it must be emphasized that such the reciprocal relation is not only sensorially immediate but also reflexively mediated. Therefore, I could change my standpoint with the others' points in such a situation. I would experience something from the perspective in his position, as same distance and reach as he does (Schutz, Luckmann 1973: 60). It is such the idealized interchangeability of standpoints as the simultaneity that makes the life-world taken for granted.

In the «face-to-face» relation «I» and «You» are taken as «We». As I mentioned above, this social world is articulated as the difference between «face-to-face» relation and «world of contemporaries». These «I» and «You» in the «face-to-face» relation grasp the others in their simultaneous level as «They».

However, including «I», «You» and «They», the «world of contemporaries» also can be taken as «We». We could call this «face-to-face» relation a «We-relation» in the «Thou-orientation» level, and at the same time we could articulate the whole «world of contemporaries» also as another «We-relation» on the fusion level of «Thou-orientation» and «They-orientation».



Naturally each agent to whom each perspective is attributed is assumed to be a person. Each person has each own biography. Such a biography is constituted as the compiled knowledge stocks and it is already and always mediated reflectively between the objective ego «me» and the subjective ego «I». The personal relation between plural persons is also mediated through some habitual knowledge stocks. The person and the personal relation are both structuralized by variously arranged knowledge stocks.

Here is a reason why the Schuzean theory of life-world has been understood as the sociology of knowledge. It was this theoretical main theme how the «immediate lived experience» and the «mediated knowledge» could be differentiated and compiled in each other. This lived experience is always and already given originally, and the difference of this lived experience and the mediated knowledge is to constitute the fundamental core of life-world.

The «We-relation» of «world of contemporaries» is distinguished from the following two worlds: «world of predecessors» and «world of successors». The former is the past world which had already passed. The latter is the future world which will come up from now. These three articulated worlds are to be put on a temporal axis from the past to the future.

This temporality is originally based on the sensory or bodily perception of each attributed persons. Its mode depends on how events could be perceived and how they could be lined up on an axis. Needless to say, such sensorially perceived events themselves are already intervened not only by the natural processes like day and night or four seasons etc. but also by the interactions with other persons. The concerned events could be sensorially experienced as appearances for agents, and each biography would be articulated by the ob-

jective astronomical time and the interpersonal temporalities. Although any personal biography may be taken as each subjective consciousness, it may be difficult to continue to be a series of only subjectively closed lived experiences. Most of experienced events, although they could be experienced lively, would always be objectified and articulated as knowledge.

The phenomenological sociology of knowledge will observe such objectified and articulated events as the components of society, setting the difference between «face-to-face» and «world of contemporaries» as a fundamental premise. The articulation between «Thou-orientation» and «They-orientation» will be always and already given there originally. However, such an articulation or two kinds of density are given with the difference between intimacy and anonymity.

The difference between intimacy and anonymity derives from the distances articulated by the sensory perceptions, bodily movements and extensions. Such living activities are based on the difference between an attainable reach and an unattainable reach. This basic difference is developed to a more complicated one with the temporal axis. If man has ever experienced an activity as reached or performed, man could imagine that the same event or some events similar to them will be anticipated and experienced as attainable or unattainable.

Such the activities always come out with various bodily movements. The bodily movements and their instrumental extension make it possible to perceive something, to attain something and to reach to something etc. From such the perceived, attained and reached points of view, namely from a future point on a temporal axis, it is possible to control things and persons. Such the reflexively structuring is not anything other than the intention of living organism.

The differences between designed situations (of persons and things) and designing persons will appear on such a reflexively structured level. The latter designing persons could take the «observer-perspective» on their own temporal axis. They could design and transform the above mentioned «world of contemporaries» into something new. They could observe their «We-relation» on their own ways. It means that the «world of contemporaries» could be partially or totally objectified from the outside of itself.

3. Symbolic Media, Money and Political Power

It was the so-called «We-relation» that could be objectified as something by someone. In other words, this sphere could not continue to be immediate between the concerned participants, but it could be variously mediated by symbolizing. It would be difficult to keep the sphere of «world of contempo-

aries» continuously homogeneous. If anything, the division of labor and the functional differentiation presuppose such the inhomogeneous settings. Each of such the functionally differentiated societies must be properly symbolized and mediated by representing each own complexity. It is not difficult to enumerate such symbolic relations which are functioning as media: power, truth, law, love, city etc. They have been well-known as the «symbolic media» (Parsons 1977) or as the «communication media» (Luhmann 1974).

Money is used as a unit of account, as a means of payment, and as a store of value (Hicks 1967: 1). Firstly goods and services are exchanged and allocated by circulations of money as currency. Secondly we hold money for transaction, as precaution or as speculation. The transaction of buying, paying, receiving etc. is an exchange at a point on the temporal axis. The precaution as well as the speculation is a temporalized action process to the future by the function of value store. In other words, money as a vehicle of information makes possible the appresentative paring of present exchange and not present exchange in a temporalized action process. The motivation of using money such as paying, buying etc. will be interpreted as a meaning of temporal process of action.

Any person cannot live his own life without risk calculation in various temporalized processes. Since the nineteenth century the modern persons have been seeking more certain and more trustworthy instance for exchange and distribution of goods and services in the modernization and industrialization. The validity of money exchange must be secured by someone or something. The idea of the central bank has been a typical example in every nation state. As a result the next media of political power would be required for coordinating it.

The function of bank is not always to be limited to deposit and loan. Banking is originally a deed, by which the credit papers are issued. To deposit money, or to open an account in a bank means drawing a bill receivable. If man saves money in a bank, man receives a bankbook from there. Such the reception of evidence would be nothing else but issuing bank notes. To deposit money at present will lead to withdrawing it in the future. Money as a vehicle could bridge between a present event and a future one. This activity of banking makes it possible to create various credits and trusts.

Money connects one event (e.g. to want something) to the other event (e.g. to enjoy it). In this meaning, money plays a symbolic role of the appresentative paring between present occurrence and non-present occurrence. The material of this vehicle has historically been particular some goods, such as shell, cloth, fur, tobacco, rice, metal and paper. Today such the materials have transformed into the electronic signals, and the miners' technique also has been evolving to a highly technical computer program of cryptographic proof.

The bond of appresentative paring makes possible the validity of general exchangeability. It creates a functional community as a sub-universe of economic system. This economic relation relies on the paring between the appresenting member and the appresented member (Schutz, Luckmann 1983: 134). Such the difference between members is originally coming out from the contingency of their interactions.

As far as the personal acts are originally based on the bodily movements of human being, the damage and injury of them would have to be assumed. The conflict of all against all is always possible in every human world. Such the problem of Hobbesian order was a typical classic theme in sociology. Therefore, it was a serious problem how persons would organize the other persons without violence. The Hobbesian classical answer was an idea of social contract. Of course, it leads to the next problem how possible such the social contract is.

Generally speaking, any democratic government has police and military force, which should be known as the legitimately institutionalized violent power. However, the most important question would be how possible was the stable vantage point of the third party for legitimation. In this article, it would be asked who could mint coins and print bank notes and how possible is a stable vantage point required for the agency.

4. Coevolution of Technology and Society

The «face-to-face» relation is based on immediately lived experiences. «I literally see my partner in front of me. As I watch his face and his gestures and listen to the tone of his voice, I become aware of much more than what he is deliberately trying to communicate to me» (Schutz 1967: 169).

Such the «face-to-face» immediate situation has been totally changed with the development of communication technology during the last century. We could consider this change as a coevolution of technology and human-being. Firstly radio, subsequently TV, these devices have opened a new situation to us. They opened us the simultaneous and far distant relation of «one to n-persons». Of course, this relation is not immediate, but the broadcasted vision on TV could have often been taken as real, as if it were felt as immediate. The other classical mass media like book, magazine, newspaper also have delivered us various realities. However, the visually moving pictures on TV had decisively changed our everyday life during the last half of the twentieth century. We could have felt such mediated television pictures as real. They have fundamentally changed the classical structure of the mundane life-world which Schutz described in the 1930s.

The «one to n-persons» simultaneous relation may be typically a relation of clergy and his believers in church, player(s) and his(their) audience in concert, and teacher and his pupil in classroom etc. These relations are originally taken as «live».

However, the broadcasted relation, which may generally be presumed as «live», is always mediated as telecommunication. The broadcast like radio and TV has synchronized a spatial distant relation between the sender and the receiver, and it has developed another extended space and time. On the other hand, the recording, editing and compiling technique has bridged even the temporal distance. Such technological evolution has been transforming various materials of medium from the phonograph record through tape and CD to DVD and Blu-ray Disc. The devices which play them also have been metamorphosing themselves from the gramophone through the stereo record player and the Walkman to the iPod etc.

Moreover, in the last decade of the twentieth century the Internet has changed the simultaneous relation of «one to n-persons» to the freely accessible relation of «n-persons to n-persons». This network which as been stretched as the World Wide Web information system transformed our life scheduling tempo itself. Man can very easily access to this network and at the same time man can very easily get out there. Our human life itself has become to be totally adapted to the internet technology. The society has transformed itself very rapidly. Today we cannot live together without this coevolution of Internet-technology and society.

The difference between «Thou-orientation» and «They-orientation» is naturally presupposed in the classical structure of the life-world. This original difference has made us the clearly articulated «face-to-face» lived experience possible. The address terms like «You» and «They» represent a certain spatial distance articulated by a certain range of attainment which the bodily movements make possible. The life-worldly space and time perceived by the bodily movement and its extension are articulated and formed by two fundamental media of the light and the sound.

The immediate lived experiences also will continue to be perceived. All of them will not be replaced with the mediated ones which could be copied, duplicated, and altered. If anything, they will be related with the mediated lived experiences more complicatedly. Today we are experiencing the others in the «face-to-face» relation, at the same time, we can experience the human beings as well as almost everything, i.e. animal, machine, robot, animation picture etc., as if they were a kind of human beings, in a quasi «face-to-face» relation on the base of «n-persons to n-persons» network. Such the «peer-to-peer» computer network is supported by a tremendously great deal of distributed anonymous persons. In other words, they are appearing and standing

on each terminal of the network from moment to moment. The difference of connecting-to-network and not-connecting-to-network in there is basically constructing the space and time of our everyday life today.

The Internet users would believe that they could perform their own acts as their own intention and decision. However, if someone could objectively observe them from the outside, they were only the persons who could be showing up as users upon the terminal units of computer network. They are always theoretically outside of this network system itself. They can be not only persons in the meaning of human being but also organizations like co-operations or governments in the meaning of juristic persons. In a near future such the persons may be replaced by robots, cyborgs or androids. In other words, any ways of appearances of our everyday life could be decided from the outside of the network system itself. The Internet itself depends on the distributed anonymous persons, i.e. human beings, robots, cyborgs, androids, co-operations, organizations and so on. At the same time such possible agents and their extensions appear variously with the evolution of Internet technology.

Money also has been based on the distributed anonymous persons and organizations. It is the general exchangeability that money has been originally symbolizing. The general exchangeability has been signed as the numeral quantity by money. The difference between exchangeable and not-exchangeable makes possible an economic system, and the lemma of not-exchangeable itself is to be put on the next difference between exchangeable and not-exchangeable. Such secondary or sequential process has been transforming the human life to the monetary calculation world.

Moreover, even such money has been rapidly and highly changing itself with the evolution of computer technique. Metal for the coin and paper for the bank note have transformed themselves into electronic signals in the computer network. The money is originally based on the distributed anonymous persons. Therefore, this «peer-to-peer» relation in the Internet could be very easily fit to the today's monetized society.

Now in this context it will be the most important problem how the validity of general exchangeability could be guaranteed. Is it secured by the state or the nation? We know that various virtual monies like the Bitcoin are actually and world widely in circulation. What makes possible this currency? More briefly saying, it will be an interesting problem whether the trust of observer on the objectified position could be replaced with the cryptographic proof by the computer technology.

Satoshi Nakamoto, who created the Bitcoin protocol and its reference software, writes: «A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution» (Nakamoto 2008: 1). Very interestingly it will

be difficult to ascertain whether this Japanese male name attributes to a single person or a team, and it will be not so important whether this name attributes to the Japanese or the others. It may mean that the Bitcoin is a genuine money, because the origin of this creation itself has been maintained as anonymous.

If a payer A pays money to a payee B, its money itself will belong to this payee B. This payer A cannot pay the same money once more to the other payee C, because he has just paid it to a payee B. This impossibility of double-spending is fundamentally important. As long as the Bitcoin also is functioning as money, any double-spending must continue to be impossible. The usage of copied bank-note is severely punished by the criminal law. It is a forgery. Therefore, any national currencies are very strictly checked and controlled by the authority concerned. It is the typical *raison d'être* of the central bank or the national government.

However, lots of digital currencies like the Bitcoin have already been used transnationally without any central authorities. It is the most important theme how the validity of virtual currency can be secured. «What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party» (Nakamoto 2008: 1). The cryptographic technique is a secure communication only between two concerned entities without any particular and established third parties. It means that the virtual currency does not rely on the trust of various authorities like governments or central banks, but only on the special technique like cryptographic proof. The above cited «two willing parties to transact directly with each other without the need for a trusted third part» mean any two parties in the «peer-to-peer» constellation. In the case of the Bitcoin this transaction is supported by lots of distributed anonymous miners. The miners in this context mean the engineers who can engage themselves in the practice of cryptographic proof. They can gain profit by their engaging in this cryptographic practice.

If the rate of return in the virtual currency users' community exceeds the cost which the miners need, this virtual community will be maintained, and if the miners who are expert in the cryptographic skills and their incidental problems could get enough profit to reflect their professional workmanship, this currency community will be growing up and enlarged. This growth will depend on the spread and scarcity of the technicians' effort and skill. The limits of growth will lead to a birth of the next virtual currency. Already the competitions between virtual currencies and real currencies have begun in this present world.

5. *Open problem: Is Spontaneous Order autopoietic or culculated?*

In the end of 1970s Friedrich von Hayek proposed the denationalization of money. His fundamental perspective was as follows. «History is largely a history of inflation, and usually of inflations engineered by governments and for the gain of governments» (Hayek 1978[1999]: 142). It would be here one of the most important philosophical themes how the political power and its arbitrariness of governments could be reduced to the minimum. The practical plan that he proposed in his book was to create a competition among plural currencies. It was no more and no less than the total privatization of the banking business and the totally borderless dealing with various currencies. In his plan lots of private and free banks could issue their own bank-notes and mint their own coins on their own responsibilities. In this very constructive proposal it was assumed that the monopoly of issuing currency by the central bank or the national government should be denationalized and abolished.

Undoubtedly Hayek supposed that people should be able to get proper information on the activities of various private banks and various markets (producing, consuming, exchanging etc.). He thought rather simply that the mass media like newspapers, radio, TV could deliver such information to the public. «For a decision so important for business as which currency to use in contracts and accounts, all possible information would be supplied daily in the financial press, and have to be provided by the issuing banks themselves for the information of the public» (Hayek 1978[1999]: 159). Certainly he assumed that the mass media co-operations also would put themselves to various competitions. Therefore, he could believe that such the competitions should assure the proper quality of information.

The competition is originally similar to the constellation of distributed anonymous persons as a premise. The economic activity is a system of actions. It is constituted of actions (buying, selling, paying etc.) and is mediated by a specific symbolic medium of money. The market exists as an environment for the economic system. Therefore, it is only a fluctuation of prices that this economic system could perceive as market information. In this meaning the market is never any economic system. The agents, who buy, sell and pay etc., show up temporarily with the events, to which such the economic actions are attributed. Such the events would be observed on the border between the economic system and its environment. Of course, the agents who perform such actions could show up as either human beings or the others. The human beings can be various human subjects, who express themselves with personal pronouns like I, you, he, she, they etc. The others can be only non-human subjects like such as organizations, mechanisms, institutions, facilities.

Observing various mechanical movements in a market, we could find out human players and impersonal effects in there. Such players include firstly distributed anonymous persons, and secondly their extensive derivatives, which should be considered as co-operations, governments, organizations etc.

Already in the end of the last century the information on market has become to be based up on the Internet. Most of economic activities, such as shopping, buying, paying, have not been done without any computer network. Such a combination between market and technology is functioning on the base of the distributed anonymous persons. Today it would not be sure whether such distributed anonymous persons in there always human beings were, as well as whether Mr. Nakamoto a human being were. We are not sure that making a decision would be done by a human being. Only a continuity of discontinuities which is constituted of the difference between access-on and access-off exists. It will be also uncertain that such the endless decision making is necessarily autopoietic or not. However, I presume that this uncertainty should be finally attributed to the speed of computer's central processing unit. But such electronic devices also will be attributed to the distributed anonymous persons like Mr. Nakamoto. Nobody knows whether human activities will be attributed to human beings in the future. Nobody knows how the classical articulation of social worlds will be still possible. Therefore, I assume that the philosophical basement of critical theory should have been already worn out by the coevolution of technology and human being. Now it is very difficult for us to find a philosophical basis for human existence.

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