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What Political Liberalism and the Welfare State Left Behind: "Democracy and Death"

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What Political Liberalism and the Welfare State Left Behind:

--Democracy and Death--

Reiko Gotoh

This article is a revised version of the paper "From the Liberal Paradox to the Capability Approach: Amartya Sen's evolving concept of rights" presented at a special session 'Amartya Sen's Philosophy and its Policy Implications' in the 72nd conference of the Japan Economic Policy Association held at Kokushikan University in Tokyo on May 30-31, 2015. Hitotsubashi University Policy Forum and the 2nd Symposium on Normative Economics 'Illusion of the Self, Absence of the Others: Methodological Reflection on Economics' held at Hitotsubashi Hall on November 18th, 2015. I sincerely thank its organizers and participants. I also benefited greatly from discussants at the research seminar.

1. The Purpose and Background of this Paper

In January 2012, two sisters were found dead due to starvation in Shiroishi, Sapporo city, Japan. The elder sister had been unemployed, fighting against a chronic disease, and looking for a job, while taking care of her younger sister with mental disabilities at the same time. She had consulted the Shiroishi ward office three times before. Their only income was the monthly disability payment of 66,008 yen for the younger sister. Their rents were unpaid and the sisters were not covered by the (supposedly universal) national health insurance. According to the Public Assistance Act, the minimum cost of living for the sisters' household amounted to 184,720 yen per month.1

Why were the sisters unable to receive public assistance? The ward office's answer to this question was quite simple. 'Because they didn't show the will to do so.' This answer simply refuses to provide any more discussion, given the 'principle of application' being taken for granted by the current public assistance system.2 It is rather difficult to argue against the claim that the sisters' rights were not unfairly violated.

The Japanese Constitution guarantees the right to well-being (a minimum standard of

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1 'A Request to Improve Administration of Public Assistance by Learning Lessons from the Shiroishi Sisters Starvation Case,' May 17th, 2012, by National Inquiry Committee on Starvation and Isolated Death. Other main materials to be examined here include 'A Reply from the Chief of the Shiroishi Ward of Sapporo City to the National Inquiry Committee on Starvation and Isolated Death' (No 309, 28th June 2012) and the 'Guideline for Public Assistance' used by officers of the Shiroishi Welfare Office.

2 The 'principle of application' is legislated in Article 7.1 of the Public Assistance Act: 'Public assistance has to provided only after an application is made by someone in need of protection, his/her supporter, or his/her family member living with him/her. However, it can be provided without application when he/she is in a critical and urgent situation (emphasized by the author).'
living). It is argued, however, it is preceded by the right to pursuing happiness and the right to personality. John Rawls' theory of justice stipulates the 'difference principle' that supports the right to live, but the principle of 'equal freedoms and fair opportunities' has a clear priority over it. In an advanced market economy, receiving no public assistance tends to be regarded as a result of an individual's own choice in her private spheres, which in turn is considered to reveal her (bounded rational) preferences under given constraints. Can laws, institutions, and academics say nothing about this?

To shed light on this problem, this article is going to apply two different approaches, used in welfare economics, to analyzing 'the right to freedom.' One is Amartya Sen's 'Social Choice Approach' and the other is also Sen's 'Capability Approach.' Below I briefly explain why I adopt these two approaches.

It is well-known that Sen has been exploring the concept of freedom in economics. His perspectives are wide-ranging. In 'Collective Choice and Social Welfare' (Sen, 1970), he reinterprets Kenneth Arrow's general possibility theorem by focusing on the conflict between the Pareto Principle and the liberal requirement. Arrow's general possibility theorem shows that there is no social welfare function that satisfies all four conditions ('Unrestricted domain,' 'Pareto Principle, 'Pair-wise Independence,' and 'Non-dictatorship') simultaneously, where a social welfare function refers to a procedure to derive a social preference from individual preferences held by members of the society. Sen replaced the conditions of 'Pair-wise Independence' and 'Non-dictatorship' in Arrow's theorem by 'Minimum Liberty,' and proved an impossibility in a similar way. As we discuss later, 'Minimum Liberty' means an individual's 'decision power' to exclude certain social states (alternatives) from the set of socially chosen alternatives. It represents a strong 'right to freedom' in the sense that individual values (preferences, evaluations, or interests) regulate social states.

Furthermore, his 'Development as Freedom' (Sen, 1999) proposes a framework for economic development as a process for people to realize 'comprehensive freedom to lead the kind of lives they have reason to value,' by utilizing various 'instrumental freedoms' (political freedom, economic advantage, social opportunity, transparent guarantee, protective, etc.) In order to capture this concept of comprehensive freedom, Sen also proposed two concepts of 'agency freedom' and 'well-being freedom.'

Agency freedom is concerned about an individual's purposes and acts. It looks at whether her will and choices are respected. Well-being freedom is about consequential

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4 See Gotoh (2015) for details.
states (well-being) for the person (called 'capability'). It looks at whether her interests (i.e., values available to her) are directly respected as they are (without necessarily being so by her own will or choice). Agency freedom is usually captured by subjective measures such as utility or satisfaction. Well-being freedom is also captured by objective measures such as positional evaluation by those in the same circumstance as her.

This article adopts Sen's 'social choice approach' and 'capability approach.' The former focuses mainly on 'agency freedom' in helping us analyze what is meant by the statement 'she didn't show her will to apply,' whereas the latter looks at the issue in terms of 'well-being freedom.'

This incident has already produced some excellent reports and analyses. There are also many research articles on welfare policies including Japan's public assistance system. Referring to these researches, however, this article adopts economic angles to study the subject for the following reasons.

First, economics assumes that individuals make rational choices based on their preferences and evaluations under given constraints. Then it provides analytical perspectives to examine circumstances for and external constraints on rational choices made by individuals. It reflects the essence of liberalism, i.e., respect for individuals, and a functional view of individuality and agency. These two approaches, first elaborated by Sen, which this article adopts basically follow the analytical framework of economics but radically criticize some core conventional assumptions and premises in order to approach a truer look on human conditions. This incident happened in the midst of the spread of liberal thoughts and the development of social security systems after the end of the Second World War. The analysis of this incident by the aforementioned two approaches sheds light on a blind spot and suggests some points to consider.

Second, as it will be clear later, analyses of this incident based on Sen's two approaches do not go beyond the academic framework. There are some limitations and inefficiencies in staying within a constrained, stylized academic framework. However, academic studies certainly affect not only the administration and practice of actual legal systems and institutions but also the social norms formed and transformed by people on a daily basis. It will be worthwhile contributing to the community of economics, rather than the global market for economics, by adopting an academic style and words.

In the following I am going to analyze Sen's 'Social Choice Approach.' Let me begin the next section by examining its cornerstone: 'The Impossibility of Paretian Liberal.'

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6 As for the normative characteristics of Japan's public assistance system, see Gotoh (2009) and Gotoh (2016).
2. The Impossibility of Paretian Liberal (Sen, 1970a, b)

(1) Summary of the Theorem

'The Impossibility of Paretian Liberal' (or so-called Liberal Paradox) means the following. When equal freedom for individual preferences (the assumption of unrestricted domain) is guaranteed, we cannot logically deny the possibility of a conflict between the Pareto Principle (of socially respecting unanimous preferences over a pair of social alternatives) and the Liberal requirement (for an individual's decisive power over a pair of social alternatives).

Let us begin by explaining the meaning of 'freedom' in the Liberal Paradox. For the present context, two concepts of freedom are incorporated. The first is implied by the 'unrestricted domain' and forbids any social intervention against individual will and preference revelations. However, it says nothing about whether revealed wills or preferences of individuals are actually realized in the process of social decisions.

The second concept is what Sen calls 'Liberal requirement,' which directly means 'individual decisive power' in social decisions. That is, if an individual prefers one alternative to the other in a pair of alternatives (social states), the latter (less preferred alternative) should not be chosen by the society. Note that this does not guarantee the social choice of the alternative preferred by him/her, hence this is a veto to be precise, but we call this an 'individual decisive power' to avoid confusion.

The Pareto Principle means a kind of 'collective decision power,' in the sense that no one can exercise the decision power by oneself, anyone can exercise it only when everybody coincides each other. It represents a condition for democracy in the sense that it gives every member an equal weight in preventing the exercise of 'collective decision power,' while it gives non-members of the society no weight in preventing the exercise of it. Note that social choice theory's underlying assumption of counting every individual

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7 This is closer to the concept of 'freedom to choose one's own strategies,' formulated as a game form in Gaertner, Pattanaik, and Suzumura (1992) for example, as the result of choice is not yet socially realized. However, if an individual chooses a particular strategy and its consequence constitutes part of the corresponding social state as it is, her strategy set itself can be regarded as something over which she has the 'individual right.'

8 In Arrow's framework, the condition of 'Unrestricted Domain' is supposed to capture, above all, the universal nature of the decision rule, i.e., social decision procedures must be defined over all logically possible preference profiles. In addition, Arrow also assumes a requirement of universality that they have to bring a non-empty set of social alternatives from any subset of the set of all logically possible alternatives.

9 As we see in the following section, if a set of alternatives contains one other than the pair of alternatives over which she has a decisive power and if the former alternative is preferred to both in the pair, then the preferred alternative in the pair will not be chosen to be realized.
with an equal weight in social decisions also represents a condition for democracy.

Suppose it is reasonable to expect that at least two individuals in a society have an 'individual decisive power' over at least one pair of alternatives, respectively. If this is not possible, it would be because of the Pareto Principle as a condition for democracy and also due to the unrestricted domain as a condition for freedom. We can understand 'the Impossibility of Paretian Liberal' as condensation or crystallization of the hidden conflict between liberalism and democracy, which has long been pointed out by many political philosophers such as Carl Schmitt\(^\text{10}\).

(2) Logical Solutions

Sen began criticizing the 'Pareto Principle' immediately after proposing the theorem, on the basis that we cannot take for granted the ethical nature of the Pareto Principle. Sen divided individual preferences into those meant to be social ('public judgements') and the others. He then suggests applying the Pareto Principle only to public judgements of the latter and not the former. Furthermore, he considers an individual who accepts the 'Liberal condition' as a norm. Such an individual only makes her 'public judgements' that are consistent with this condition. He proves a theorem whereby this paradox can be solved if just one such individual should exist (Sen, 1976; Suzumura, 1978, 1979; See appendix for details).

It has been pointed out by other economists that the Pareto Principle is not sufficient as a criterion for resource allocation. However, few authors claim it is neither necessary. Sen is unique not only for questioning the ethical status of the Pareto Principle in political context but also for looking at it in terms of publicness as individuals’ moral features. This approach led to discussion of public reasoning and deliberation later in his work.

(3) The Scope of the Impossibility of Paretian Liberal

Sen went further to criticize so to speak the idea of 'positional independence'. That is, under any preference profiles, when people's preference rankings over a certain pair of alternatives remain the same, the social ranking of the two alternatives should remain the same, independent of their positional relations with the other alternatives.

We obtain Kenneth Arrow's 'Independence of irrelevant Alternatives (Pairwise Independence)’ condition by replacing 'a certain pair' with 'any pair\(^\text{11}\).’ Sen emphasized

\(^{10}\) See Gotoh (2015) for details.

\(^{11}\) It is known that 'Unrestricted domain,' 'Pareto Indifference condition,' and 'Independence of
that IIA condition is not used to derive the 'Impossibility of Paretian Liberal.' At the same time he points out that the 'Pareto condition' incorporates this feature, as it requires that under any preference profile, if social rankings over any pair of alternatives are the same across all individuals, the social ranking of the two alternatives should remain the same, independently of their positional relations with the other alternatives.

Note that the 'individual decisive power' also incorporates this requirement, as it demands that under any preference profiles, for at least one pair of alternatives, if a particular individual ranks them in the same way, their social rankings should remain the same 12.

As we already explained, the 'unrestricted domain' condition requires the expression of 'under any preference profiles' in the previous paragraph to be 'any logically possible preference profiles.' Earlier we found in this condition liberalism in a narrow sense that we shouldn't interfere with wills and preferences revealed by individuals. We have to remember, however, that the broader the scope of freedom for individuals, the stronger the force of legal systems and institutions that control their freedom, i.e., the system of order becomes tougher vis-a-vis free actions of individuals. This condition indeed requires a high level of generality and universality for the legal system and institutions that are expected to be accepted by people and ultimately control their thoughts and values.

Subsequently Sen went on to criticize the situation whereby people merely discuss general, complete, and highly abstract rules that can be applied to any set of feasible alternatives for any preference profiles, under the narrow definition of liberalism. He also argued against concluding the discussion only by proving some logical impossibility or possibility 13. This was because, in practice, on one hand concrete interpretations and handlings of many hard cases are left to legal and administrative discretions while on the other hand their results, whatever their contents are, can often be justified by the name of those general, complete, and highly abstract rules 14.

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12 Sen proved his own Impossibility Theorem of the Paretian Liberal by using the universality of the domain to show the existence of a preference profile where individual rights and the Pareto principle are not compatible. I thank Professor Koichi Tadenuma for pointing this out.

13 See Sen (1966, 1967) for his skepticism about rational universalizability of morality.

14 Majority rules are a good example of the universal rule. Note Sen's following remark, for example. 'Majority rules have a political limitation of being unable to adjust different freedoms.' (Sen 2014, p.40)
(4) Challenges for the Paretian Liberal Approach

Discussion on the compatibility of Paretian Liberal condition also presupposes the existence of a system of rights where individual spheres for rights are consistent to each other (See Appendix). However, a serious problem can arise regarding inconsistencies among various rights. It is not only about conflict between rights of different individuals (when individual preferences are given). It is also about conflict between different rights held by a particular individual or inconsistency between specific rights and the access to decision procedures. For example, it would not be obvious how to weigh different rights such as freedom of action, freedom to work, and freedom to live, or how to relate specific rights and the right to weigh them. Some real incidents suggest that in certain situations the society should present certain kinds of rights of some individuals prior to the presenting of other kinds of rights, sometimes even before their decisions are made.

In order to examine these problems we have to go beyond the framework for formal aggregation of individual (ordinal and interpersonally incomparable) preference and step into the situation of social choice. Sen's widening concern with individual freedom and rights has led to an extension and deepening of Arrowian social choice theory. We don't get into details here but let us call the extended one 'Sen's social choice theory.' In the following section we look at its characteristics by analyzing the case we introduced in the beginning.

3. A Case Study by the Social Choice Approach

(1) The Basic Model

Suppose there is a society with a certain number of members. Individuals declare their reflexive and acyclical preferences over a nonempty set of alternatives. We call a 'social choice function' a procedure specifying a nonempty subset (or a 'choice set') from a set of alternatives based on the profile of their declared preferences. We assume that a 'social choice function' satisfies the following two conditions.

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15 Individual preferences don't satisfy completeness and transitivity but they satisfy acyclicity, which guarantees that no choice set is empty. (Sen 1970)
16 'Social choice function' defined here is a version of 'the functional collective choice rule (FCCR)' as it's domain is a set of individual preference profiles and it's range is a set of subsets of the universal set. However, it is different from a standard 'the functional collective choice rule (FCCR)' because it does not require completeness of corresponding individual preferences nor consistency among alternative sets (Sen 1970, 2002, ch. 3).
'Pareto Principle': For any pair of alternatives x and y, y must not be chosen from a set of alternatives including x if all individuals prefer x to y (as long as x is available).

'Individual Decisive Power': For a pair of alternatives x and y, y must not be chosen from a set of alternatives including x if a certain individual prefers x to y (as long as x is available). Similarly, x must not be chosen from a set of alternatives including y if he/she prefers y to x (as long as y is available).

Moreover, we assume that in general social choice functions satisfy the condition of 'unrestricted domain,' that is, individuals can have any preference over their set of alternatives.

(2) Analysis

Suppose that the elder sister (individual 1) has been offered by a welfare officer (individual 2) the following 4 options {Seek (a job), Not Seek, Apply, Not Apply}. Furthermore, the individual 1 has been told that she has a decisive power over the following pair of options.

individual 1's decisive power: {Apply, Not Apply}

Let us remember that individual 1 and individual 2 can have any preference over the four options. Then suppose they have the following preferences (in descending order). We assume the other members of the society all have the preference held by individual 2.

individual 1's preference: Seek > Apply > Not Apply > Not Seek

individual 2's preference: Not Apply > Seek > Not Seek > Apply

This shows that individual 1 prefers Apply to Not Apply, while she shares a preference for Seek over Apply with individual 2. Note also that individual 2 and the rest of the society want individual 1 to choose Not Apply more than anything. With these assumptions, let us examine which alternative will be socially chosen by a social choice

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17 We assume that 'Apply' and 'Seek' are different, independent alternatives. For example, the former can be to use public assistance and the latter to use the 'Job seekers support system,' which we discuss later.
function that satisfies the Pareto principle and the principle of 'individual decisive power.'

First, note that all individuals prefer 'Seek' to 'Apply' and 'Not Apply' to 'Not Seek.' Thus, the Pareto principle excludes 'Apply' and 'Not Seek' from the choice set. Also, individual 1's 'decisive power' means 'Not Apply' cannot be socially chosen.

This leaves us with 'Seek' as the only result of our social choice. Accepting this result, individual 1 does not apply for public assistance and goes home to start seeking a job.

Three remarks follow. First, we described alternatives regarding individual 1's action alone. Now we can describe extended alternatives by including individual 2's (and the other members') situation. Individual 1's application (and receiving of public assistance) would increase a burden on individual 2 while individual 1's use of “the job seeker's assistance system” would decrease individual 2's burden. When individual 1 neither chooses Apply nor Seek, individual 2's burden will remain the same. In this case, the alternative set will be extended as follows.

individual 1's preference: (Seek, Less Burden) > (Apply, More Burden) > (Not Apply, Same Burden) > (Not Seek, Same Burden)

individual 2's preference: (Not Apply, Same Burden) > (Seek, Less Burden) > (Not Seek, Same burden) > (Apply, More Burden)

Let us suppose that individual 1's decisive power is re-defined over the pair {((Apply, More Burden), (Not Apply, Same Burden))} and individual 2 now has a 'individual decisive power' over two social states {((Seek, Less Burden), (Not Seek, Same Burden))}. Based on these suppositions, if individual 1 and 2 express the following preferences, we can easily confirm that the choice set becomes empty. This example is nothing else than

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18 “the job seeker's assistance system” is a system under which people who are not qualified to receive employment insurance aim to find a job earlier by improving their skills through job training. Such people may receive “training in support of job seekers” or “public job training” for free in principle. “Hello Work” will support such people in a positive manner during the training period and after the end of the training period. To people who meet certain requirements of income and assets, etc., “benefits for receiving job training” are provided during the training period. See, “Law on support of employment of specified job seekers through implementation of job training, etc.” (2011, the ministry of Health, Welfare and Labor, no. 93).

19 In the standard definition, 'individual rights' are confined to individual 'private spheres,' i.e., where one's action does not affect the others. Here, however, we define both individual 1's and 2's decisive powers by taking into account their affects on others. The former interpretation would strengthen the power of the Paretian Liberal Paradox while it weakens that of 'individual decisive power' itself. The purpose of this paper does not adopt the 'private sphere' definition as we focus on conflicts among individual decisive powers and those between individual decisive power and his/her own interest.
what Sen calls the Liberal Paradox.

individual 1's preference: (Not Seek, Same Burden) > (Apply, More Burden) > (Not Apply, Same Burden) > (Seek, Less Burden)

individual 2's preference: (Not Apply, Same Burden) > (Seek, Less Burden) > (Not Seek, Same burden) > (Apply, More Burden)

Second, here let us assume that individual 2 has accepted the 'individual decisive power' as a social norm in forming and declaring his/her 'public judgement.' That is, as far as individual 1’s action { (Apply, More Burden), (Not Apply, Same Burden) } is concerned, individual 2 now has the same preference as individual 1’s. Thus we see the following individual preferences.

individual 1's preference: (Not Seek, Same Burden) > (Apply, More Burden) > (Not Apply, Same Burden) > (Seek, Less Burden)

individual 2's preference: (Seek, Less Burden) > (Not Seek, Same burden) > (Apply, More Burden) > (Not Apply, Same Burden)

When we apply the procedure we used before, there is only (Seek, Less Burden) left in the choice set. Hence we have the same conclusion as before that individual 1 does not apply for public assistance.

Third, we go back to the original set of alternatives and consider the case where individual 1 regards Apply as the most preferable option for him/her. In this case individual preferences are as follows.

individual 1's preference: Apply > Seek > Not Apply > Not Seek

individual 2's preference: Not Apply > Seek > Not Seek > Apply

In this situation, the 'Pareto Principle' and the condition for 'Individual Decisive Power' leave two alternatives, Apply and Seek, in the choice set. We need a third criterion to select just one alternative. Suppose we adopt the 'reservation of social decision' as the third criterion. Then individual 1 ends up going home without applying for public assistance after all. In Section 4 we are going to discuss how to solve the problem by
changing sets of alternatives themselves.

(3) Note: Validity of the Social Choice Model

The above model describes the elder sister's circumstance not as a game played by two symmetric players but as a social choice situation that symbolizes Japanese society. Is this description appropriate in the beginning?

This social choice model won't be appropriate if the welfare officer behaves as an actor with his/her own interests and purposes or if the visitor (the elder sister) expects such behavior and merely acts accordingly.

However, there may be a reason to adopt the social choice model if we can make the following assumptions. First, the welfare officer (individual 2) takes as an essential role of his/her 'profession' respecting the visitor's rights and will for his/her possible actions and helping make a better social decision. Second, the welfare officer stands as a representative of the social conscience (what Kant calls gemeinschaftlicher Sinn) rather than merely as an advisor for the elder sister (individual 1). Third, individuals cannot reasonably reject any result reached through the social choice procedure that satisfies certain desirable criteria based on individual preferences.

Let us elaborate on the last point. According to Thomas Scanlon, what people can reasonably reject depends not only on their important purposes and the conditions of their lives but also on the society they live in. In this particular case, the elder sister faced options (Apply, Not) and (Seek, Not) but might not have been able to reasonably reject the social conscience that prefers 'Seek' to 'Apply.' Moreover, even when the result was against her interest, she might have given up arguing against it because it was the 'consensus' reached via a due process, which no one cannot reasonably reject. The social choice approach is more appropriate in analyzing these conflicting situations with a small number of individuals, as it can describe them as an abstract space of the 'society.'


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20 According to Kant, 'communal senses (sensus communis)' refers to the idea of communal senses (gemeinschaftlicher Sinn), i.e., 'to reflect on and care about (a priori) how all other people are represented within oneself.' It occurs by 'cross-checking relative human reason and one's own judgments.' Its purpose is 'to avoid illusions that might poorly influence one's judgments based on some individual subjective conditions that can easily be regarded as objective.' (Kant 1999, 180-181)

21 See Scanlon (1982).
Now let us go back to our original question. Can we say that agency freedom of individual 1 was respected in this social decision process? Individual 1 was guaranteed a decisive power over (Apply, Not). She could have and reveal any preference (the unrestricted domain). Her decisive power was not overturned by any social choice procedure that satisfied the Pareto Principle. If individual 1 had accepted the result of 'social choice' (by all members of the society including the two individuals) and decided 'not to apply,' then we might be able to say that her agency freedom was respected.

There is another issue we have to consider, however. As Sen points out, individual choices can vary, depending on the set of alternatives (and as the external reference standard changes). Was she able to have a say in setting her set of alternatives in the first place? If she were, would she have chosen her act differently? We would imagine that the answer to the latter question is affirmative and the former negative. To see this, we add a hypothetical analysis next.

Suppose that individual 1 now has four extended alternatives as follows: (Seek and Apply, Seek and Not Apply, Not Seek and Apply, Not Seek and Not Apply). (The previous alternatives are underlined.) As we change descriptions of the alternatives, individual 1’s decisive power is also changed to over the pair (Seek and Apply, Seek and Not Apply). Suppose that preferences of individuals 1 and 2 (the others) are also changed as follows.

Individual 1: Seek and Apply > Not Seek and Apply > Seek and Not Apply > Not Seek and Not Apply

Individual 2 and others: Seek and Not Apply > Seek and Apply > Not Seek and Not Apply > Not Seek and Apply

Applying the social choice function described above, we can exclude, by the Pareto principle, 'Not Seek and Apply' and 'Not Seek and Not Apply.' By individual decisive power, we can also exclude 'Seek and Not Apply,' which leaves us with 'Seek and Apply' only. If individual 1 accepts this result, she applies for public assistance on the day and goes home to prepare for job hunting.

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22 This is based on a judgement that individuals are free to apply or not, as long as they do job hunting. Adding another pair (Not Seek and Apply, Not Seek and Not Apply) to her individual decisive power won't change the result.

23 Note that the Japanese public assistance system has established the “Independence Support Program” in 2005 and has established the “Independence Support System for the Needy” in 2013, both of which aim at promoting labor supply, but the former is for current recipients to exit the public assistance system, while the latter is for current non-recipients not to enter the public assistance system.
This hypothetical reasoning indicates a possibility that individual 1's preference was constrained by the set of alternatives offered to her. Moreover, it shows that she was unable to participate in the process of deciding on her set of alternatives with enough information available to her. If these were the case, we can hardly claim that her agency freedom was guaranteed.

We can now finish our analysis using Paretian Liberal perspectives. We are going to discuss its implications in the concluding section. Now we will analyze well-being freedom, which is about situations of individuals as a consequence of individual choices. If an expected situation as a result of her choice had possibly made her hesitate to 'Apply,' can we really say it was her own 'choice'?

5. Analysis of Well-being Freedom using the Capability Approach

The capability approach aims to capture individual well-being, i.e., what one can actually do or be at the moment by using various resources available for him/her. We begin by trying to formulate and operationalize this approach.

(1) The Basic Model

An individual’s capability is defined as the set of 'functionings' (various doings and beings) that she can achieve with resources (commodities) available to her and her ability to utilize them. The same amount of her resources and abilities can result in different vectors of (achieved levels of various) functionings, depending on how they are used by the individual. Her capability shows the limit on her achievability of various functionings.

In economics, an individual's opportunity set is represented for example by the set of consumption points available to her on the commodity space. The size of her opportunity set represents her resource constraints and the shape of its frontier shows relative prices of different commodities. Moreover, individual preferences (utility function) are defined over consumption points plotted on the commodity space and, under several assumptions, 'optimal points' are specified from the opportunity set that maximizes her utility.

Borrowing this framework, an individual's capability is represented by the set of functioning vectors she can choose on the functioning space, which is itself a subset of the real value space. The size of her capability represents her resource constraints and the shape of its frontier conversion rates of various functionings. Individual preferences are

Actually, there is no system which promotes getting a job with an income support.
defined over various functioning vectors on the functioning space. The optimal point is one in her capability set that is preferred most by the individual.

Further, in order to analyze the effect of changes in resource constraints on the capability set, we construct our basic model consisting of the following three spaces:

(i) Functioning space
(ii) Resource (commodity)-functioning space
(iii) Resource (commodity) space

(i) and (iii) are connected by (ii). (See Figure 2 for example.)

We suppose actual lists of functionings, resources, and conversion abilities depend on the theme and context. 'Capability' (set), 'resource conversion ability' (function), and 'preference and evaluation' (function) defined in each space are usually assumed to satisfy convexity, convexity, and quasi-strong concavity, respectively, but these are relaxed, depending on the theme and context.

(2) Specifying the Functioning Space

We take two functionings, 'keeping self-respect' and 'living a decent life,' as the x and y axes of the functioning space. We assume that achieved levels of each functioning are, at least ordinarily, measurable by an intrapersonally and interpersonally comparable unit. We simplify our arguments by assuming that individual preferences defined over functioning vectors satisfy some of the standard assumptions of rationality in economics (reflexivity, transitivity, completeness, monotonicity, etc.).

We assume also that individual 1 (the elder sister)'s current levels in both functionings (in point b*) are higher than if she receives public assistance (in point b'). If she receives public assistance (in point b'), her 'self-respect' would diminish but her living standard would be higher.

In order to understand the elder sister's decision 'not to apply for public assistance,' we can explain why we capture her capability in the space of two functionings, 'living' and 'self-respect,' and describe her three situations as above.

As I explained before, Japanese public assistance system requires any applicant and recipient to 'use up' all his/her assets (life insurance, flat or condominium, any other assets).

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24 See Gotoh (2014) for detailed mathematical formulation of the basic model.
25 These assumptions are sufficient conditions for the existence and uniqueness of the optimal point.
26 This means that they don't have to be cardinally comparable.
27 Here we exclude an uncertain possibility of 'Apply but Do Not Receive.' However, we can examine the case of 'Apply but Do Not Receive' as resulting in point c that is dominated by point b in both 'self-respect' and 'decent living.'
'expensive things,' gifts, etc.) by selling them. However, assets are associated with credit, trust, reputation, prestige, or whatever Rawls called the 'social basis of self-respect.'

What we call 'self-respect' here has to be distinguished from 'self-esteem,' since self-respect is defined over her own situation, not over differences (by comparison) with others. It also derives from her reflection rather than from evaluations by others. It would be difficult for her to keep 'self-esteem' independently of differences with others or evaluations by others in the society today. For example, if one's own assets turn out to have very low prices, her self-esteem would be very much damaged and her self-respect might be threatened. Even then, she may be able to keep her 'self-respect' if she can recognize the historical significance and intrinsic values of those assets in her life.

This paper focused on a specific functioning of 'self-respect' as well as of 'living' because the 'social basis of self-respect' has never been regarded as something to be socially secured, despite growing social acceptance of liberal thoughts and recognition of the importance of self-respect in individual lives. One of the purposes of this paper was to reflect on the meaning of this situation in relation to the rational behavior of individuals.

(3) Analysis

We begin by studying a case where two statuses of receiving and not receiving public assistance are on the same capability frontier (Figure 1).

By definition, an individual can choose any point on her capability frontier, depending (only) on her preferences. In this case, she can move from point b (not receiving public assistance) to point b' (receiving public assistance with a higher living standard), by, for example, selling her assets and giving up on a certain amount of her 'self-respect.' Or she can also move back from point b' (with public assistance) to point b by buying some assets and giving up on a certain amount of living standard.

We can say that it would be her own choice based on her preferences if she decides to remain on point b without public assistance. She could have chosen either point if she liked. If she recognized that she could have chosen the point she didn't after all and decided not to receive public assistance, then it was nothing other than her own autonomous choice. We can say that preferences rationalizing such a choice tend to favor 'self-respect' rather than 'living' as depicted in Figure 1.

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Both living and self-respect lowered by unemployment and disease (transit from $b^* \rightarrow b$), suppose the following two alternatives

$b' = \{ \text{received and higher living} \}$

$b = \{ \text{non-received and higher self-respect} \}$

If these two points are on the same capability $O^{**}$ and she remains at $b$, it is by her choice based on her preference: $b^* \approx b'$.

current choice: $\{ b \} = C(\{ b, b' \})$

previous choice: $\{ b^* \} = C(\{ b^*, b, b' \})$

Figure 1: received case and non-revived case are in the same capability

Figure 1: Receiving public assistance and not, on the same capability frontier

In reality, however, receiving public assistance not only diminishes her 'self-respect' in exchange for a higher standard of 'living.' It might have transformed her capability. That is, receiving public assistance might have changed her capability from one with a higher achievability of 'self-respect' to another with a lower 'self-respect.' If she had to make a decision in such a situation, the meaning of her choice would be rather different. We can examine this in the next section.

6. Analyzing Agency Freedom using the Capability Approach

(1) Transformation of Opportunity Sets on the Resource Space and Capabilities

Let us take income and asset, two mutually independent factors in the resource space instead of the functioning space we examined above. Their initial endowments and their relative price determine the resource opportunity set. In general, a change in the amount of income or asset diminishes the opportunity set. A change in the relative price alters the shape of the opportunity set. We assume that the income level for the sisters and the relative price of asset are lower when they decide on receiving public assistance or not.

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29 Here the relative price of income and asset is the price to exchange them in the universal market. A decrease of the asset value due to depreciation is regarded as a decrease of the amount of the asset.
This means that their opportunity set has changed to one with a much lower level of achievable income for them.

Next we constitute the 'income-living space' that converts income into a 'living' functioning via an individual 'income usability.' We can also constitute the 'asset-selfrespect' space that converts asset into her 'self-respect' via her 'asset usability.' In general, her 'income usability' can shift upward or downward, depending on her health and other factors, whereas her 'asset usability' depends on her own views and interpretations. Remember that the elder sister had some trouble with her internal organs. We therefore assume that her income usability decreases while her ability to maintain her self-respect (asset usability) doesn't change.

Within this framework, we infer her capabilities, on the functioning space, when she receives public assistance and not. First, with no public assistance, her lower income means a diminished set for income and asset on the commodity (income-asset) space. Coupled with her decreased income usability, this greatly reduces her achievable level of 'living.' Her achievable level of self-respect remains the same however.

When she receives public assistance, her achievable level of 'living' decreases less. However, the marginal transformation rate between two functionings, i.e., 'living' and 'self-respect,' decreases a lot, beyond a certain level of point of After this point, it is difficult to make a choice between two functionings, i.e., accepting a lower standard of 'living' to improve on one's 'self-respect.' (See Figure 2)

[Figure 2: Transformation of one's capability by transformed income-asset levels and]
resource usability]

(2) The Optimal Point with Preferences for Functioning Vectors and Capabilities

For each of these capabilities, we examine an optimal point that gives the highest evaluation based on individual preference for functioning vectors. In Figure 3, point b (consumption point with no public assistance) shows the optimal point for her capability when receiving no public assistance, while point b' does the optimal point when she receives public assistance. With her preference assumed in Figure 1, she evaluates point b higher than point b'. In this situation, if she seeks for constrained maximization with her preference regarding functioning vectors, she decides not to receive public assistance.

Now, Figure 4 shows that individual 1’s preference has changed to one that favors living much more than self-respect. Her new preference gives point b' (consumption point with public assistance) a higher evaluation than point b (consumption point with no public assistance). In this situation, if she aims for constrained maximization with her preference for functioning vectors, she chooses receiving public assistance.

In either case, information about individual capabilities recede into the background, as in the standard case of budget constraints on the commodity space, as long as we assume individuals act to maximize their preferences for functioning vectors under constraints. If the role of capability set is reduced to helping select the optimal point, the other points that are within her capability set but not chosen will have no significance after all. In an extreme case, those other points, apart from the optimal point, did not need exist in the beginning. However, as is clear from our discussion so far, we cannot completely reduce her capability to the ‘opportunity set’ in this sense. She could have chosen any point in her capability, if she liked, and each such point should characterize her life as a person.

For example, it is possible that she changes her preference and evaluates receiving public assistance higher than no public assistance, while at the same time keeping her evaluation of capabilities as before. That is, she may evaluate capability C (capable of having a higher self-respect in exchange for a lower living) higher than capability C’ (incapable of doing so). In this situation, she faces a cruel dilemma between her preference for functioning vectors and evaluation of capabilities.

30 In the analysis below we assume that receiving no public assistance results in her lower income and decreased relative price of asset over income (due to effects of selling off assets) whereas receiving public assistance won't change the relative price because effects of selling off assets are offset by decreased demand for assets.

31 In the analysis below we assume that receiving no public assistance results in her lower income and decreased relative price of asset over income (due to effects of selling off assets) whereas receiving public assistance won't change the relative price because effects of selling off assets are offset by decreased demand for assets.
Figure 3: A Choice Problem Faced by an Individual: Optimizing Behavior under Transformed Capability

Figure 4: The Optimal Point after Changed Preference for Functioning Vectors

(3) Appearance of the Third Capability and Changes in Choice Behavior

We consider the following imaginary case in order to examine individual evaluations
of capabilities. Suppose that Article 4 of the Public Assistance Act is modified to increase the limit of assets that a recipient is allowed to keep while the level of public assistance remains the same. This means the achievable level of her 'self-respect' is increased, in exchange for the level of her 'living.' This expanded capability set gives a new optimal point, which we call b**. (See Figure 5) Suppose that points b** and b (the optimal point without public assistance) are on the same indifference curve. In this situation, if we ask her whether or not to receive public assistance, her answer will depend on her own evaluations of capabilities. Then she is most likely to apply for public assistance if receiving public assistance makes her capability (possible combinations of various levels of living and self-respect) much larger, though it might slightly decrease her achievable level of self-respect.

Figure 5: Imaginary Choice Situation: Improved Capability by an Increased Asset Limit

(4) Discussion
We examined possible consequences of receiving public assistance by using the Capability Approach. Let us note the following points. The purpose of the current public assistance system is to improve 'living' standards of the recipients and their ultimate exit from the system (promoting independence). Leaving aside the issue of incentives, these
are in a complementary relation. In contrast, maintaining recipients' 'self-respect' is not explicitly mentioned as an objective of the public assistance system. Rather, the current public assistance system provides a rationale for putting 'living' and 'self-respect' in a trade-off relation. That is, the current system can require a recipient to give up on her 'self-respect' as a price for the benefit of her improved 'living.' When this rationale or requirement is explicitly pursued in practice, her capability including 'self-respect' is severely distorted.

7. Concluding Remarks

The elder sister had visited the welfare office three times. The reason why she nevertheless didn't receive public assistance was, according to the record, 'because she didn't show her will to do so.' Admitting the fact, what was the real problem here? The purpose of this paper was to analyze this problem by shedding light on the 'non-choice elements' that deeply affect individual rational choices.

Analyses in this paper referred to the basic framework of economics. This was because economics has traditionally paid attention to individual (economic agent)'s choice behaviors under given constraints and provided a useful theoretical framework to describe the relation between individual and collective choices. However, traditional economics has not paid enough attention to background circumstances for individual choices, since it was convenient to regard any economic phenomena as 'their own rational choice.'

This paper also assumed throughout that the elder sister would behave rationally. Note that 'rationality' here is broader than (and does not contradict) the definition of rationality used in standard economics, because it admits that individuals not only form their preferences autonomously but also try to understand the social conscience (sense of community) and accept social decisions. Also, individuals here are allowed to have preferences not only over consequences of choices (achieved functionings) but also over opportunities (capabilities). This paper adopted 'Sen's Social Choice Approach' and the 'Capability Approach' in order to better capture individual choice circumstances and the agency and individuality of choosing individuals. Results of our analysis can be summarized as follows.

Our analysis using Sen's Social Choice Approach shed light on the possibility of someone dying even as social choice procedures involving her can ostensibly satisfy all conditions of free expression of individual preferences, the Pareto Principle (collective decision power), and respect for the individual decisive power. This also led to the following reflection. The elder sister could certainly express her own preferences freely.
She could also reject 'Not Apply' by her 'individual decisive power.' However, she was unable to take part in the process to decide and understand what would be important information to protect her own and her sister's interests and what alternatives would be available or not in her choice (action) set. Therefore we can hardly say the elder sister's agency freedom was guaranteed.

Our analysis using the Capability approach has made clear the following. We have to look not only at achieved functionings of individuals but also at 'capabilities' open to them, in order to guarantee their well-being freedom. In modern society it is essential for individuals to have reasonable prospects for 'living' and 'self-respect.' However, she had a very limited and miserable prospect for the future assignment of capability. By applying for public assistance, her capability will shrink in 'self-respect' in exchange for a better prospect for 'decent living', while by rejecting public assistance, her capability will shrink in decent living in exchange for a better prospect for self-respect. If a person does not want to limit her capability by her own will and action, that is, if she is going to resist abandoning her well-being freedom, she is likely to face an ultimate choice, which is too heavy to be made by one individual. Actually, abandoning well-being freedom by oneself is similar to suicide and she had not committed to suicide at the last moment.

These are the (tentative) conclusions of this paper from analyzing the starvation case using Sen's Social Choice Approach and the Capability Approach. Here are some remaining issues to be tackled in the future.

Aristotle says that 'choice will be deliberate desire of things in our own power' (Aristotle 1980/2009, III.3, p. 45). According to him, '[d]eliberation is concerned with things that happen in a certain way for the most part, but in which the outcome is obscure, and with things in which it is indeterminate. We call in others to aid us in deliberation on important questions, distrusting ourselves as not being equal to deciding.' (Aristotle 1980/2009, III.3, p. 44)

The elder sister visited the welfare office seeking to find an 'advisor' with whom to deliberate on 'important questions.' However, the officer she met there was no 'advisor' to deliberate with but an embodiment of the 'social conscience.' She had to make a judgement while the outcome was still 'obscure' and 'indeterminate.' She did make a decision but it might not have been what Aristotle would call a 'choice.'

If she didn't know what alternative actions she could choose, didn't have any reasonable prospect for her living and self-respect, and didn't have any advisor to consult, then could the fact that she 'didn't show her will to apply' for public assistance justify anything at all?

Let us say again that this incident happened in the middle of the widespread support for liberal thoughts and social security systems in post-World War II Japan. The main
issue of this incident, the principle of application, is supposed to be the leading guardian of individual 'freedom of choice.' Nevertheless, as we saw in this paper, it would be dangerous to assume that individual choices (not to apply, for example) automatically satisfies her own interests if she cares about the social conscience when forming her preference and makes a choice by accepting a social decision procedure that reflects her will correctly.

We can probably say that the 'principle of application' is a blind spot of the welfare state. If this is the case, what alternatives do we have? In general the gap between an individual's will and her interests can be recognized only after she makes a choice and suffers a clear disadvantage. It is thus quite difficult to prevent this in advance but our analyses can offer some suggestions in this context. For example, we can provide caseworkers as 'advisors,' create some variants of the current options, select a set of indispensable functionings, and choose a set of resources as means, for living a decent life in Japan today. These are nothing new and surely available within the framework of the modern Japanese welfare state.

A more essential problem is to consider the implementation of relevant policies. Even though there are cases where an individual's choice depends on factors which she cannot control, which may cause irrecoverable loss for her, their number can be rather small and they can be left simply as the 'residual.' Then they won't affect economic theories nor people's minds, let alone any institutions. It is estimated that 45 people (31 men and 14 women) starved to death in total in 2011 and almost 2000 people if we include death due to malnutrition\textsuperscript{32}. In Tachikawa city, Tokyo, roughly 40 people died alone in 2012\textsuperscript{33}.

Should we leave them as the residual or do anything to help them? If we indeed do something, what would be a rational measure? Is action justified because anyone can be one of them, or because we have to tighten governing mechanism of the state and social order, or because it will be beneficial to them, whoever they are? The question to be tackled in the future is: How can we form the will and logic to keep reforming the existing welfare state for their own benefits, however small their number is?

[Appendix]

A. Outline for the solution of the Paretian Liberal Paradox

\textsuperscript{32} From Population Dynamics Statistics 2011.
\textsuperscript{33} Tachikawa City's 'List of incidents of solitary death reported to the city,' September 2012, Special Accounts Committee.
(i) Construct a system of rights in which all individuals' rights (a non-empty set of pairwise relations that directly translate individual rankings to social evaluations) are mutually consistent.

(ii) Form 'individuals' public judgements (rankings)' from their preference orderings defined over all alternatives by extracting those parts (partial orderings) that they themselves want to be respected publicly.' Redefine the Pareto Principle based on these preference profiles that incorporate their individual public judgements. (See Sen 1976)

B. Variations of an individual's 'public judgement'

(Example 1) It 'reflects all individual rankings in a system of rights' and 'restrains from expressing those individual rankings that might be inconsistent with the other individuals' rights.' (Sen 1976)

(Example 2) It 'reflects all individual rankings in a system of rights' and has preferences that do not depend on other individuals (and focus only on their own situations). (Suzumura 1978)

(Example 3) It remains indifferent as long as other individuals' rights are concerned. (Hammond 1992)

C. Variations of the theorem

If there is at least one individual who forms her 'individual public judgement' that respect a system of rights, then the Pareto principle and the condition for minimal liberty are compatible (See Sen 1976, Suzumura 1978, and Hammond 1992) and we can construct a complete Paretian extension rule respecting individual rights. When we design a game form with such a rights-respecting, Paretian extension rule, individuals can always act lawfully, whatever actions they take in such a game. (Gotoh and Suzumura, 2001)