

## **A Senian Quadrant Distinction Model in Response to Sen's Liberal Paradox**

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### **Abstract**

In *The Impossibility of a Paretian Liberal* (1970), Amartya Sen claims that there is no *social decision function* which can simultaneously satisfy the minimal conditions of unrestricted domain, Pareto optimality, and liberalism. This logical impossibility (Sen's liberal paradox) has important implications in socio-political philosophical discourse, especially in the context of democracy. Sen's liberal paradox asserts that at the fundamental level of logic, two important democratic considerations – considerations of social efficiency and considerations of advancing individual liberties – are inherently in conflict with each other, and the only way to resolve the conflict is for one consideration to take precedence over the other. In an attempt to respond to Sen's liberal paradox in a way that is still in line with Senian thought, particularly mostly in reference to two of Sen's more recent works – *Development as Freedom* and *Rationality and Freedom*, this paper presents a quadrant distinction model that categorizes *social decision contexts* within the domain of *social decision functions* that consider the conditions of Pareto optimality and liberalism (termed *SPL*) into four quadrants based on the two distinction axes of externality (y axis) and capability criticality (x axis). Through the Senian guiding principle of expanding informational bases to enable rational evaluative judgements, different approaches to resolve Sen's liberal

paradox is proposed for each quadrant. For Quadrant II (high externality, low capability criticality), it is proposed that considerations of social efficiency must take precedence. For Quadrants III and IV (low externality, low and high capability criticality, respectively), it is proposed that considerations of advancing individual liberties must prevail. Quadrant I (high externality, high capability criticality) is the most problematic but it is proposed that through further expansion of informational bases, the paradox can be resolved through the next stages of rational evaluative judgements – Stage 1: re-categorization, and Stage 2: valuational weightings.

**Keywords:** Amartya Sen, liberal paradox, informational bases

### Sen's Impossibility Theorem

Arguably one of Amartya Sen's most important contributions to social choice theory is his discovery of the liberal paradox, first explicated in his six-page landmark paper *The Impossibility of a Paretian Liberal*, published in 1970.<sup>1</sup> This short paper presented a radical claim on the fundamental conflict between considerations of social efficiency and individual liberty, and has led to a rich area of discussion and inquiry in social choice theory.

Sen's radical claim is presented in the form of a logical theorem, which he proved through a logical proof and illustrated through an example. The theorem is concerned with so-called *social decision functions*, which are collective choice rules (or functions) in social choice theory which determine the best collective choice among alternative social states, given respective individual orderings. Sen emphasizes that a *social decision function* has a broader range compared to another form of collective choice rule – a *social welfare function* (employed by Kenneth Arrow in his

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<sup>1</sup> Amartya Sen. "The Impossibility of a Paretian Liberal" *The Journal of Political Economy* 78, no. 1 (Jan-Feb, 1970): 152-157.

famous impossibility theorem<sup>2</sup>). A *social welfare function* has a range that is restricted to orderings while a *social decision function* has the broader range of a choice function, which goes beyond the restrictions of strict orderings in the sense that it has a more minimal requirement of simply choosing the best alternative instead of a strict ordering of alternatives. Sen then refers to his work published a year before (in 1969) which showed that Arrow's impossibility theorem holds for *social welfare functions* but not for certain *social decision functions*.<sup>3</sup>

Sen then proceeds to define the conditions of unrestricted domain, Pareto optimality, and minimal liberalism.

1. The condition of unrestricted domain prescribes that in a particular collective of  $n$  individuals, all relevant and logically possible individual orderings from all

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<sup>2</sup> Arrow's impossibility theorem can be illustrated in the so-called "voting paradox." Let a collective be composed of only three individuals  $n_1$ ,  $n_2$ , and  $n_3$ . The individual preference orderings over three alternatives  $x$ ,  $y$ , and  $z$  are as follows:  $x > y > z$  for  $n_1$ ,  $y > z > x$  for  $n_2$ , and  $z > x > y$  for  $n_3$ . Applying the *social welfare function* of majority decision in attempt to come up with a collective ordering will result to a paradox. The majority (in this case,  $n_1$  and  $n_3$ ) prefers  $x$  versus  $y$ , and the majority (in this case  $n_1$  and  $n_2$ ) also prefers  $y$  versus  $z$ . However, at the same time, the majority (in this case  $n_2$  and  $n_3$ ) also prefers  $z$  versus  $x$ . Thus, it is not possible for a *social welfare function* to come up with a collective ordering over the alternatives  $x$ ,  $y$ , and  $z$ . This illustration of Arrow's impossibility theorem is drawn from Amartya Sen, *Development as Freedom* (New York: Alfred A. Knopf, Inc., 1999), 251.

<sup>3</sup> Amartya Sen. "Quasi-transitivity, Rational Choice and Collective Decisions" *Review of Economic Studies* 36, no. 3 (July 1969): 381-393.

individuals must be included in the collective choice rule. Sen represents this as *Condition U*.<sup>4</sup>

2. The condition of Pareto optimality is a minimum criterion of efficiency for social outcomes. A social outcome, for instance with respect to the distribution of a particular functioning among the individuals of the collective, is Pareto optimal if it is no longer possible to make one individual better off without making another individual worse off. It is important to note that the condition of Pareto optimality is a minimum criterion of efficiency in the sense that it is only concerned with aggregative (or total) efficiency and not with distributive efficiency and corresponding concerns of equality or equitability among individuals in a collective.<sup>5</sup> Sen expresses a weak version of the condition of Pareto optimality as *Condition P* – If all individuals prefer an alternative  $x$  versus an alternative  $y$ , then the collective must prefer  $x$  versus  $y$ .
3. The condition of minimal liberalism draws from the conventional liberal principle which can be expressed as follows – if individual  $n_1$  prefers  $x$  versus  $y$ , then society must also prefer  $x$  versus  $y$ .<sup>6</sup>

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<sup>4</sup> Thus, in a certain narrow sense, *Condition U* can be called either the democracy, anti-dictatorship, rationality, or fairness condition.

<sup>5</sup> For a somewhat more elaborate but still brief discussion on this distinction, see Sen, *Development as Freedom*, p. 286.

<sup>6</sup> Sen recognizes that there can be many other possible conceptions of liberalism apart from this crude conventional liberal principle but clarifies that the scope of his discussion is limited only within the logical analysis of the possibility of a *social decision function* that can simultaneously satisfy the minimal conditions of unrestricted domain, Pareto optimality, and liberalism. Nonetheless, I think this crude expression of the liberal principle at least satisfactorily captures common-sense liberal values and attitudes in normal everyday social life.

Sen minimizes this condition by limiting the scope to only two individuals each having one pair of alternatives over which each one is decisive. This minimal condition is expressed as *Condition L\** - For at least two individuals and for at least one pair of alternatives for each of them, the individuals should be decisive to their respective pairs of alternatives, that is for each individual  $n_i$ , if individual  $n_i$  prefers  $x$  versus  $y$ , then the collective must also prefer  $x$  versus  $y$ .

The radical claim of Sen's impossibility theorem is that there can be no *social decision function* which can simultaneously meet the requirements of *Condition U*, *Condition P*, and *Condition L\**. Sen proves it through a logical examination<sup>7</sup> and illustrates it through an example.<sup>8</sup> Because

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<sup>7</sup> Sen's proof via logical examination can be summarized as follows. Let the society be comprised of  $n$  individuals, with individual  $n_1$  being decisive over alternative set  $(x, y)$  and with preference ordering  $x > y$ , and individual  $n_2$  being decisive over alternative set  $(z, w)$  and with preference ordering  $z > w$ . Let  $z = x$ . Let all  $n$  individuals prefer another alternative  $y$  versus  $w$  and thus to simultaneously meet *Condition U* and *Condition P*, the society must also prefer  $y$  versus  $w$ . The expanded individual orderings for the two decisive individuals is as follows:  $x = z > y > w$  for  $n_1$  and  $y > w > x = z$  for  $n_2$ . It can then be shown that it is not possible to choose a best alternative among  $x = z$ ,  $y$ , and  $w$  based on the simultaneous requirements of *Condition U*, *Condition P*, and *Condition L\**, because every alternative is worse than any other based on one or more of the three conditions. Based on *Condition U* and *Condition L\** together,  $x = z$  is worse than  $w$  (because of  $n_2$ 's preference ordering which under *Condition L\** must be decisive) and  $y$  is also worse than  $x$  (because of  $n_1$ 's preference ordering which under *Condition L\** must be decisive). Based on *Condition U* and *Condition P* together,  $w$  is worse than  $y$  because all  $n$  individuals prefer  $y$  versus  $w$  and thus, the society must also prefer  $y$  versus  $w$ . Therefore, there is no best alternative and consequently, there is no *social decision function* that simultaneously satisfy the requirements of *Condition U*, *Condition P*, and *Condition L\**.

a *social decision function* has a broad range, as mentioned earlier, and *Condition P* and *Condition L\** are minimal conditions, then conceivably, possible exceptions to the impossibility result are few. A number of social choice theorists and other scholars have responded to Sen's liberal paradox, and some of these responses have been concerned with explicating the possible exceptions to the impossibility result. For the purpose of the discussions in this paper, it is sufficient to say that in summary, resolving the liberal paradox would consist of either eliminating or significantly weakening one of the three conditions - *Condition U*, *Condition P*, or *Condition L\**.<sup>9</sup> Given that *Condition U*

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<sup>8</sup> Sen's illustrative example involves two individuals (let us call them again  $n_1$  and  $n_2$ ) with three alternative social states pertaining to who should read a controversial book:  $x = n_1$  reads the book,  $y = n_2$  reads the book,  $z =$  no one reads the book. The preference ordering of  $n_1$ , who is a prude and doesn't want either him/herself or  $n_2$  to read the book but would rather read the book him/herself instead of allowing  $n_2$  to read it, is  $z > x > y$ . On the other hand, the preference ordering of  $n_2$ , who would like to read the book but who would take more delight in forcing  $n_1$  to read the book, is  $x > y > z$ . Between alternatives  $x$  and  $z$ , applying liberal values would arguably result to the ordering  $z > x$  because  $n_1$  should not be forced to read the book if he/she doesn't want to. Similarly, between alternatives  $y$  and  $z$ , applying liberal values would arguably result to the ordering  $y > z$  because  $n_2$  should be allowed to read the book because he/she wants to. Combining the two, the preference ordering based on the application of liberal values is  $y > z > x$ . However, choosing  $y$  would violate the Pareto principle because both  $n_1$  and  $n_2$  prefers  $x$  versus  $y$  in their individual orderings. Given that each of the three alternatives is worse than some other alternative based on either the principle of liberalism or the Pareto principle, there can be no social decision function in this example that can simultaneously meet the requirements of liberalism and the Pareto principle, while including the preference orderings of both  $n_1$  and  $n_2$  in the collective choice rule.

<sup>9</sup> For a somewhat more elaborate but still brief discussion of some possible exceptions to the liberal paradox, see Amartya Sen, *Rationality and Freedom* (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 2002), 389-392. As

intuitively seems to be a necessary condition for an actual social choice for it to be rational and fair,<sup>10</sup> and *Condition P* and *Condition L\** are already weak conditions, significantly weakening any of the three conditions would result to a substantial narrowing of the applicability of the theorem to actual exercises of social choice. Thus, at least initially, it seems as though the most plausible way of resolving the liberal paradox in actual exercises of social choice is to eliminate any one of the three conditions.

It is not difficult to appreciate the implications of Sen's liberal paradox to important concerns in human social and political life. Sen's impossibility result claims that at the fundamental level of logic, in any exercise of social choice, it is possible to satisfy conditions of social efficiency (i.e. to

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evident in the previous footnotes explaining Arrow's impossibility theorem and the logical proof and illustrative example on Sen's liberal paradox, even basic theorizing in social choice theory can be quite technical. Thus, the details of how an elimination or significant weakening of either *Condition U*, *Condition P*, or *Condition L\** will lead to a resolution of the liberal paradox will not be discussed any further in this paper, whether in the main body or here in the footnotes. However, to provide one example for the reader, it can be noted, referring to Sen's illustrative example, that the impossibility result applies in particular to so-called nosy preferences, wherein the preference ordering of one individual is related to the preference orderings of other individuals. Thus, conceivably, if this nosy relation is eliminated, the logical impossibility will no longer hold. This is tantamount to a significant weakening of *Condition U*. However, the weaker *Condition U* would have a much narrower application in actual exercises of social choice, wherein individuals often come up with certain rational preference orderings in relation to the preference orderings of other individuals. For better appreciation, see Sen's brief discussion of the "rational fool" in Sen, *Rationality and Freedom*, pp. 6-7.

<sup>10</sup> Because the exclusion of logically possible individual orderings, which are otherwise relevant, from the collective choice rule would impoverish the rational process of collective choice and would be unfair to the individuals whose preference orderings are excluded.

attain the greatest common good) or to advance individual liberties, but never both at the same time. This paper is particularly interested in the implications of Sen's liberal paradox to the conventional conception of democracy. Democracy, as a socio-political model, is often asserted as superior in the sense that it advances both the greater common good as well as individual freedoms. Given that it has been shown that at least to a certain relevant extent the simultaneous achievement of these two ideals in an exercise of social choice is logically impossible, and that the most plausible way of resolving the logical impossibility in an actual exercise of social choice in a democratic society is to eliminate the condition of meeting either of the two ideals,<sup>11</sup> would it still be possible to generate reasonably acceptable social choices in a democracy? An attempt to address this question will be presented in the subsequent second half of this paper.

### **A Senian Quadrant Distinction Model**

At least some plausible readings of Sen's more recent works, particularly his *Development as Freedom* and his *Rationality and Freedom*, would posit that Sen himself would respond in the affirmative to the question posed at the closing of the last section – yes, it is possible to generate reasonable and acceptable social choices despite conflicting considerations of social efficiency and individual liberties. The key towards making the social choice reasonable and acceptable is the application of a rational process of evaluative judgement in determining the social choice. When logically conflicting considerations are considered in the evaluative judgement, the judgement will inevitably be incomplete in the sense that one of the logically conflicting considerations will be judged as having more importance and thus have a higher level of decisiveness as compared to

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<sup>11</sup> Because the broad inclusion of and fairness among individuals seem to be a more fundamental ideal in a democracy, and thus *Condition U* cannot be eliminated.



the other considerations. Nonetheless, despite being incomplete, there can still be a plausible final evaluative judgement, and the evaluative judgement can still be reasonable and acceptable if the process of evaluative judgement is rational.<sup>12</sup> Applying this to the specific problem of reconciling the logically conflicting considerations of social efficiency and individual liberties, the evaluative judgement towards the final social choice will necessarily be incomplete because one of the two logically conflicting considerations will take precedence over the other, but nonetheless, both considerations can still be included in the rational process of evaluative judgement.

One central element in Sen's notion of a rational process evaluative judgement is the expansion of informational bases, which could be the key towards the rational resolution even of logically conflicting considerations.<sup>13</sup> The main premise is that every evaluative judgement is based on a certain informational base, which both includes and excludes certain information in accounting for the important considerations in the process of evaluative judgement. Sen expounds on this in his critiques of both utilitarianism, for excluding considerations on the primacy of individual freedoms in its advancement of the maximization of total collective utility, and libertarianism, which ascribes absolute priority to individual freedoms and excludes consequentialist considerations.<sup>14</sup> In this particular case, the expansion of informational bases consists of including in the rational process of evaluative judgement the informational bases that are excluded in utilitarianism and liberalism, towards what Sen calls a "goal-rights system," which he

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<sup>12</sup>For a related discussion, see Sen, *Development as Freedom*, pp. 76-81.

<sup>13</sup> Sen discusses this extensively in his *Rationality and Freedom*, often employing the technical methodologies of social choice theory, but for a simpler discussion particularly applied to Arrow's impossibility theorem, see Sen, *Development as Freedom*, pp. 249-254.

<sup>14</sup> Sen, *Development as Freedom*, pp. 55-67

characterizes as “a consequential system that incorporates the fulfillment of rights among other goals.”<sup>15</sup>

I now proceed to methodologically apply this Senian idea of expanding informational bases to Sen’s liberal paradox, in an attempt to show how reasonable and acceptable social choices can be generated despite the logical conflict between Pareto optimality and liberalism. The first step of expanding the informational bases of this particular realm of evaluative judgement is to recognize the breadth of the possible domains of the set of *social decision functions* that consider both the considerations of Pareto optimality and of liberalism (Let’s call this set of *social decision functions SPL*). By domain I mean to refer to the aggregate of possible actual social situations and contexts wherein a *social decision function* of the type *SPL* is needed to determine the final social choice.<sup>16</sup> A specific element in the domain of *SPL* can

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<sup>15</sup> *Ibid.* p. 212.

<sup>16</sup> In invoking the terminology of the domain of a *social decision function*, I make an analogical reference to terminologies used for mathematical functions. For a mathematical function representable in a two-dimensional Cartesian plane, with the two axes being x (horizontal) and y (vertical), and with y being a function of x or  $y=f(x)$ , the range of a specific function is the set of all possible y values, and the domain of a specific function is the set of all possible x values. In other words, the domain of a mathematical function is the set of all independent values that can be substituted to the variable x such that there is a determinate result of the function  $y=f(x)$ . Thus, since a *social decision function* is still a function (although a logical instead of a mathematical one), and the idea of the range of a *social decision function* has been briefly discussed earlier in this paper, then I think it is plausible to likewise conceive of the domain of a *social decision function*, which pertains to the set of possible independent inputs to the *social decision function* such that it yields a determinate result. However, it is important to note that the x and y axes in a Cartesian plane invoked in this analogical reference to mathematical functions should not be confused with the x and y axes that will be invoked in subsequent discussions in this paper on the Senian quadrant distinction model pertained to in this section’s title.

be termed as a *social decision context* and thus, the domain of *SPL* can be defined as the set of all applicable *social decision contexts* wherein a *social decision function* of the type *SPL* is needed to generate the final social choice. A *social decision context* can have its corresponding attributes which include the alternatives available, the individuals involved, and the character of the choice that need to be made. This recognition of the breadth of the domain of *SPL* is an important one especially since all the examples presented in Sen's *The Impossibility of a Paretian Liberal* employs *social decision contexts* that could be deemed as trivial – the choice of what color to paint your wall, the choice of whether to sleep on your back or on your stomach, and the choice of who should read a controversial book. This first step in expanding informational bases lead to the insight that there are many more *social decision contexts* within the domain of *SPL*, each of which could either be important or trivial to a certain extent.

The second step in expanding the informational bases to Sen's liberal paradox consists of making important distinctions among different *social decision contexts* in the domain of *SPL*. An important qualification to make is that not all *social decision contexts* in the domain of *SPL* are the same in terms of certain important distinguishing considerations, and thus conceivably, not all *social decision contexts* in the domain of *SPL* have the same solution. The distinction scheme I will apply in this juncture is a quadrant distinction model defined by two axes, each of which is related to one of the two logically conflicting considerations of Pareto optimality and liberalism.<sup>17</sup>

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<sup>17</sup> Again, I make an analogical reference to help locate this idea of using a quadrant distinction model. One popular example is the importance-urgency quadrant distinction model used in categorizing different tasks that a person needs to accomplish. One axis distinguishes between tasks with low importance and high importance, while the other axis distinguishes between tasks with low urgency and high urgency. This results into four distinct categories of tasks – 1) high importance, high urgency, 2) high

The first axis related to the consideration of Pareto optimality, arbitrarily assigned as the y axis, represents the distinguishing attribute that can be termed as externality. Externality pertains to the relations between an individual's choices to other individuals and their choices, and is broadly defined to include considerations of the consequences of the choices of an individual to other individuals and their choices, but not necessarily limited to consequential relations alone. Conceivably, there are *social decision contexts* wherein an individual's choice can be reasonably deemed to have a strong relation with other individuals and their choices, even though the individual's exercise of that choice technically has no consequence to the other individuals and their choices. For instance, in the *social decision context* that pertains to the choice of whether or not motorcycle riders should be required to wear helmets when driving, a person who does not own nor drive a motorcycle nor is closely related to someone who does, may nonetheless reasonably feel that his or her own preference in relation to the motorcycle rider's choice is that the motorcycle rider should wear a helmet. The distinction axis representing externalities distinguishes in terms of a notion of magnitudes or degrees of externality i.e. some *social decision contexts* in the domain of *SPL* have high externality while others have low externality.

The second axis, related to the consideration of liberalism, arbitrarily assigned as the x axis, represents the distinguishing attribute that can be termed capability criticality. This notion is based on Sen's capability approach which puts forward the idea of a person's freedoms as comprising the set of capabilities of a person to live the life he or she values and has reasons to value,<sup>18</sup> and which

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importance, low urgency, 3) low importance, low urgency, and 4) low importance, high urgency – each having a prescribed right approach on how a task belonging to the quadrant must be approached.

<sup>18</sup> For a more elaborate discussion on the capability approach particularly in the context of Sen's critiques against

presents an alternative view of poverty as capability deprivation.<sup>19</sup> Thus, the notion of magnitudes or degrees of capability criticality is dependent on the idea that some *social decision contexts* in the domain of *SPL* have higher capability criticality while others have lower capability criticality depending on the specific freedom involved in the specific *social decision context* considered. For instance, it is not difficult to reasonably argue that a *social decision context* that considers a person's freedom to education has higher capability criticality compared to a *social decision context* that considers a person's freedom to paint the color of his or her walls with the color that he or she pleases. In the earlier case, following the Senian notion of poverty as capability deprivation, the person involved will become more impoverished if he or she is denied the freedom to education, while in the latter case, the person involved will not be as impoverished as the person involved in the first case if he or she is denied the freedom to paint his or her walls with the color he or she pleases.

Now that the two distinction axes have been defined, the distinction plane already has the consequent distinction quadrants: Quadrant I – high externality, high capability criticality, Quadrant II – high externality, low capability criticality, Quadrant III – low externality, low capability externality, and Quadrant IV – low externality, high capability externality. Conceivably, different *social decision contexts* can already be categorized into the different distinction quadrants based on where they figure from a magnitude standpoint with respect to the two distinction axes. However, it is important to note that this very act of distinction also requires a high level of rationality to be meaningful and effective, and thus also requires an expansion of informational bases. One needs to rationally discern whether a particular *social decision context* has a high or low externality, and whether this same *social decision*

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utilitarianism and liberalism, see Chapter 3: *Freedom and the Foundations of Justice* in Sen, *Development as Freedom*, pp. 54-86.

<sup>19</sup> See Sen, *Development as Freedom*, pp. 87-110.

*context* has a high or low *capability criticality*, and this process of rational discernment would sometimes require certain hegemonic ideologies to be challenged.

I now proceed to make some brief remarks on what could be the plausible approach to resolve the liberal paradox in each of the distinction quadrants, starting with the less problematic ones.

*Social decision contexts* that are best categorized within Quadrant II (high externality, low capability criticality) can perhaps be collectively called matters of collective welfare. In such *social decision contexts*, it can be argued that the best approach towards resolving the liberal paradox is to allow considerations of Pareto optimality or social efficiency to take precedence over considerations of liberalism. This is because in the process of rational evaluative judgement, the objective of the greater common good is more likely to outweigh to a large extent the capability-enriching potential of the freedom that will be denied. One possible example is the earlier mentioned case of the *social decision context* pertaining to the social choice of whether or not to require motorcycle riders to wear helmets when driving. In this case, the key social welfare or efficiency consideration is the maximization of collective safety, and it can be reasonably argued that the denial of the motorcycle rider's freedom to choose for himself or herself whether or not to wear a helmet does not result to a significant impoverishment of his or her capabilities to live the life he or she values and has reasons to value, but on the contrary, such a denial of freedom which would result to greater collective safety could even enhance other more capability critical freedoms (such as the freedom to live without handicap). It is also conceivable that in this case, at least a disproportionate majority of a collective would prefer the social state where motorcycle riders are required to wear a helmet when driving over the social state where they are not, and thus the social choice in favor of the earlier social state would be as close as possible to meeting the condition

of Pareto optimality in the strict sense.<sup>20</sup> Conceivably, other similar *social decision contexts* wherein the denial of individual freedoms with low capability criticality is necessary to advance greater concerns of collective welfare, and potentially to even enhance other capability critical freedoms, can also be categorized under Quadrant II.

Quadrant III (low externality, low capability criticality) is the distinction quadrant where *social decision contexts* which could be called matters of private taste can be categorized. It is intuitive that for *social decision contexts* that can be categorized under Quadrant III, the best approach towards resolving the liberal paradox is to allow individual liberties to almost unconditionally take precedence over considerations of social efficiency. Sen's own examples from *The Impossibility of a Paretian Liberal* can be categorized under Quadrant III – the choice of what color to paint your wall, the choice of whether to sleep on your back or on your stomach, and the choice of who should read a controversial book. However, it is important to note that categorizing a particular *social decision context* under Quadrant II would sometimes require a serious exercise of rational evaluative judgement to lead to the rational recognition that such a *social decision context* is a matter of private taste, despite antagonistic social forces that might

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<sup>20</sup> It is important to note that even though the final social choice is reasonable and acceptable because the process of evaluative judgement is carried out rationally with a broad informational base, the final social choice may still not meet either *Condition P* or *Condition L\** in their strict logical senses. It is important to draw the distinction between meeting the logical demands of either *Condition P* or *Condition L\** and generating a reasonable and acceptable social choice in actual *social decision contexts* given conflicting considerations of social welfare or efficiency and individual liberties. The latter problem is of course closely related to the earlier problem but nonetheless, it is plausible that in actual *social decision contexts* within the domain of *SPL*, the best rational and acceptable social choice may not strictly meet the logical requirements of *Condition P* or *Condition L\**.

claim otherwise, such as in the case of the choice of who should read a controversial book, which could be affected by the social force of censorship. Nonetheless, in a democratic society, I think it is plausible to presume at least a minimal sense of respect for private choices among individuals in the society. Sen himself hinted on this in *The Impossibility of a Paretian Liberal*.

“The ultimate guarantee for individual liberty may rest not on rules for social choice but on developing individual values that respect each other’s personal choices.”<sup>21</sup>

*Social decision contexts* that can be best categorized under Quadrant IV (low externality, high capability criticality) can be collectively called matters of life-enriching private freedoms. As with the case of Quadrant III, it can be argued that the best approach towards resolving the conflict between considerations of social efficiency and individual liberties for *social decision functions* categorized within Quadrant IV is to allow the latter to take precedence over the earlier. One example that can be invoked is the *social decision context* that is concerned with whether or not to allow individual freedom of religion. It can be argued that an individual’s freedom to engage in the religious practice of his or her choosing is an important capability in living the life he or she values and has reasons to value, and upon rational evaluative judgement, it can be recognized that this freedom should be a matter of private choice and should not be interfered by externalities.

*Social decision contexts* that can be best categorized under Quadrant I (high externality, high capability criticality) are the most problematic because in the first degree of rational analysis, it seems as though neither of the two considerations of social efficiency and individual liberties could take precedence over the other. Thus, such *social decision contexts* can perhaps be collectively called vaguely

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<sup>21</sup> Sen, *The Impossibility of a Paretian Liberal*, p. 155-156



by the term matters of both social and individual importance. It is problematic to ignore considerations of social efficiency because individual choices in these *social decision contexts* are closely related to other individuals and their choices, which may or may not include considerations of consequences. It is also problematic to allow considerations of social efficiency to take precedence over considerations of individual liberties because the denial of the freedoms involved will result to a significant impoverishment of a person's capability to live the life he or she values and has reasons to value. In these cases, following Sen's idea on rational evaluative judgements, the next plausible step forward could consist of further expanding informational bases to enable the next stage of rational evaluative judgement. This could lead to a re-categorization of particular *social decision contexts* into either Quadrant II (high externality, low capability criticality) or Quadrant IV (low externality, high capability criticality), and in more extreme cases, even to Quadrant III (low externality, high capability criticality). One example that can be invoked is the *social decision context* pertaining to the social choice of whether or not to allow same-sex couples to get married. Initially, it can be argued that this *social decision context* has both high capability criticality and high externality. Denying an individual the freedom to marry the person he or she loves would lead to the serious impoverishment of a person's capability to live the life he or she values or has reasons to value. On the other hand, still in many societies in the world today, a same-sex couple's choice to get married seems to be strongly related to other individuals and their choices, in the sense that some individuals would prefer that same-sex couples are not allowed to get married. A clear example of how a process of rational evaluative judgement has led to the re-categorization of this *social decision context* into a different quadrant is the history of the LGBT rights movement in the United States. Throughout many decades, the legal battle of the LGBT rights movement on different LGBT concerns, from the abolishment of anti-homosexuality laws, to the institutionalization of anti-discrimination laws,

to the legalization of gender assignment changes and same-sex marriages in some states, to the recent legalization of same-sex marriage in all states, has primarily been supported by a strong defense of the constitutional right to privacy.<sup>22</sup> Thus, after a long process of rational evaluative judgements, it was recognized that this particular *social decision context* is actually best categorized under Quadrant III (low externality, high capability criticality) and so the best approach towards resolving the liberal paradox is to allow considerations of individual liberty to take precedence over considerations of social efficiency.

But how about *social decision contexts* under Quadrant I that cannot yet be re-categorized to any other quadrant given the current progress of the exercise of rational evaluative judgement? For instance, in the case of the *social decision contexts* pertaining to mandatory military service in some democratic countries, it can be argued, even given current rational evaluative arguments, that these *social decision contexts* both have high externality and high capability criticality. An individual's choice of whether or not to engage in military service is closely related to other individuals and their choices, which may include considerations of consequences to national security and to the collective culture of nationalism. On the other hand, requiring mandatory military service from an individual who otherwise would not choose to engage in military service can be argued to constitute a significant impoverishment of the individual's capability to live the life he or she values and have reasons to value. In such cases, the Senian approach is to again expand the informational bases to enable the next stage of rational evaluative judgement. Just because a *social decision context* is categorized under Quadrant 1 does not

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<sup>22</sup> For this brief discussion of the legal battle of the LGBT rights movement in the United States, I am indebted to the discussions of Prof. Emmanuel Q. Fernando, Ll. B., D.Phil. in a *Seminar on Ethical Theories* class I took at the University of the Philippines – Diliman, 1<sup>st</sup> Semester, AY 2015-2016.

mean that no further valuations and weightings of valuations can be done. It can be argued, by refining the idea of the degree of externality and capability criticality beyond the binary measure of high and low, that in a particular *social decision context* in Quadrant I, considerations of individual liberty still outweigh considerations of social efficiency, or vice versa. In Senian thought, considerations of individual freedoms should take at least relative priority,<sup>23</sup> and thus conceivably, in such exercises of weighing between considerations of social efficiency and individual liberty, a sort of “relative weight adjustment factor” that is greater than 1.0 can be applied to the latter. What is important is to further expand informational bases to generate a rational evaluative judgement of relative weightings of valuations, such that ultimately the final social choice generated is reasonable and acceptable.

## Conclusion

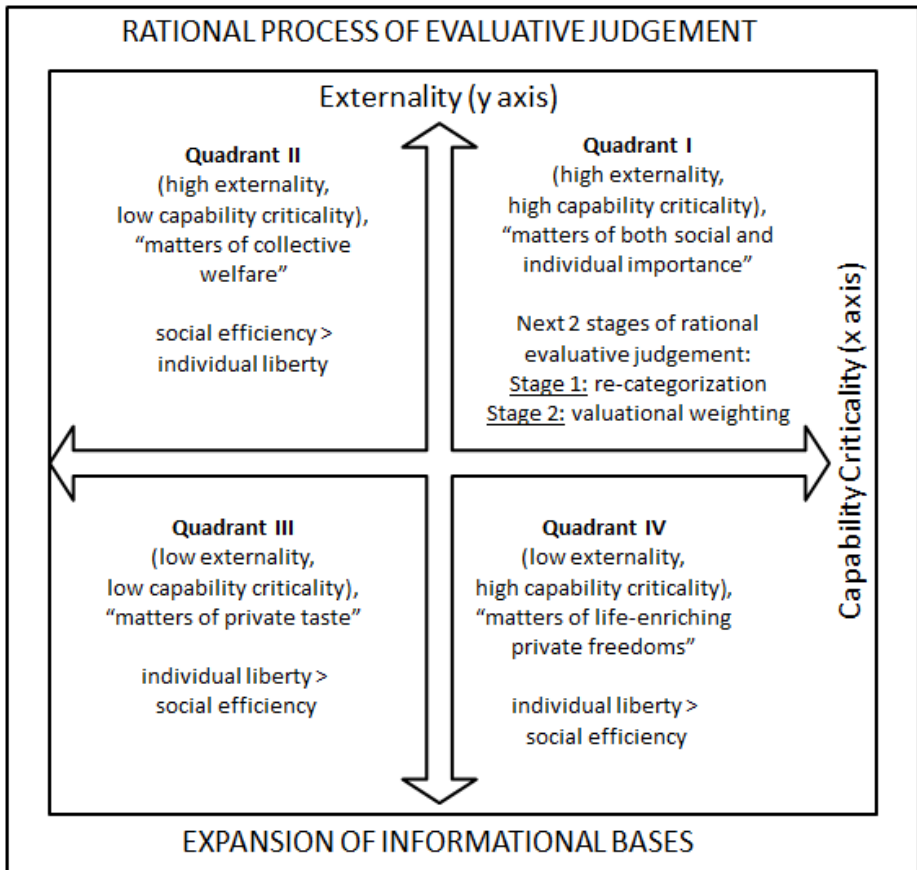
In this paper, I have presented the initial conceptual sketch of a quadrant distinction model in an attempt to respond to the impossibility result of Sen’s liberal paradox, in a way that is still in line with Senian thought. The moral argued is that the fundamental conflict between considerations of social efficiency and individual liberty must be recognized and accepted, but this does not mean that reasonable and acceptable social choices cannot be generated. Through the expansion of informational bases, which involves making important distinctions among *social decision contexts* within the domain of *SPL*, a process of rational evaluative judgement can be enabled, and in such a manner, the final social choice, although necessarily incomplete, can nonetheless be reasonable and acceptable.

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<sup>23</sup> As asserted in various junctures in Sen, *Development as Freedom*.

## Illustration

The following figurative illustration summarizes the Senian quadrant distinction model presented in this paper.



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