

## DISCUSSION

### COMMENT ON CRAVEN

#### INTRODUCTION

In Craven (1982), John Craven discussed a resolution of the liberal paradox by restricting the domain of the collective choice rule over individual preferences. He states: "The main conclusion of this paper is that if we accept that liberalism may be interpreted as an opinion of individuals rather than as a property of the collective choice rule, there is no paradox in the conjunction of liberalism and the pareto principle." (p. 358). Thus, if the individuals in a society are 'liberal', then the society will be and we will need no restriction on the collective choice rule to ensure this result. There is a good deal of truth to this, but Craven's views are vague on the matter of just how much tolerance by the members of a society is necessary for there to be no conflict between the Pareto rule and the exercise of rights by individuals. In other words, just how restricted must the domain of individual preferences be to permit individuals to 'do as they please' for some choices.

In what follows, various domain restrictions that have been used before in the literature are discussed. We show that there are a variety of ways to restrict the domain of individual preferences that will prevent the paradox. We then go on to discuss the distinction Craven makes between liberalism as a restriction on the collective choice rule, and liberalism as a restriction on the domain of individual preferences. We argue that this difference is not very significant.

#### 1. A SIMPLE MODEL

To begin, we outline a version of the Liberal Paradox. The structure we use will be that followed in Breyer and Gigliotti (1980). These concepts are quite useful in discussing some of the points Craven makes about individuals choosing alternatives that affect only themselves.

There is a set  $N$  of individuals,  $i = 1, \dots, n$  and a set of issues,  $j = 1, \dots, m$  with  $m > n$ . A social alternative,  $x = (x_1, \dots, x_n)$ , is a collection of outcomes of issues such that the outcome of each issue is consistent with the outcomes of all other issues. The set of all social alternatives is the *agenda*. Individuals may rank alternatives according to any ordering, but the following condition must hold.

*Separable Preferences:* An individual,  $k$ , has separable preferences if, for

$$\begin{array}{ll} x = (x_1, \dots, x_j, \dots, x_m) & x^* = (x_1, \dots, x_j^*, \dots, x_m) \\ y = (y_1, \dots, y_j, \dots, y_m) & y^* = (y_1, \dots, y_j^*, \dots, y_m) \end{array}$$

$xR_kx^* \Leftrightarrow yR_ky^*$  where  $R_k$  is the weak preference ordering of individual  $k$ . The alternatives  $x$  and  $x^*$  are called *j-variants*, as are  $y$  and  $y^*$ , since they only differ in the outcome of issue  $j$ . (This term was introduced by Gibbard (1974).)

Seidl (1975), without knowledge of Gibbard's work, developed a more general concept than *j-variance*, called technological separability. Gibbard (1974) introduced the concept of unconditional preferences, which are nearly identical to separable preferences, as used by Breyer (1977). Gibbard (1974) also introduced the liberalism definition we use. These assumptions eliminate inconsistencies between liberalism and unrestricted domain, discussed by Craven and discussed earlier by Gibbard (1974) and Suzumura (1978).

*Issue Liberalism:* For each issue,  $j \in M$ , there is exactly one individual,  $i = r(j)$  where  $r(\ )$  is a surjective mapping from issues to individuals, who is decisive for this issue. Whenever  $x$  and  $y$  are *j-variants*, for the issue individual  $i$  controls,  $xP_iy \Rightarrow xPy$ .

We also have a weak Pareto rule:

If  $xP_iy$  for all  $i$ , then  $xPy$ , where  $P$  is the social preference relation.

To generate the liberal paradox, we need only use the following individual preference orderings.

- (1)  $x, z, y$  These rankings are from most preferred to least, with
- (2)  $z, y, x$  strict preference.

The terms  $x$ ,  $y$  and  $z$  are the social alternatives, made up of the outcomes of issues:

$$x = (x_1, x_2, x_3)$$

$$y = (x_1, x_2^*, x_3)$$

$$z = (x_1^*, x_2, x_3)$$

Thus,  $x$  and  $y$  are 2-variants, and  $x$  and  $z$  are 1-variants. The rights assigned to each agent, compatible with Issue Liberalism, allow that Agent 1 will choose for society between  $x$  and  $z$ , and Agent 2 will choose for society between  $x$  and  $y$ . The collective choice rule will rank the alternatives as follows: (using  $P$  to represent the social preference relation)

$x P z$  By the assigned rights of 1 and 2, respectively.

$y P x$

But,  $z P y$  by the weak Pareto Rule.

Thus, the social preference relation is cyclic, and no alternative is 'best', revealing the conflict between liberalism and the pareto rule when any separable preference ordering is admitted to the domain of the collective choice rule.

## 2. DOMAIN RESTRICTIONS

There are many ways to restrict the domain of the collective choice rule to remove the paradox. Craven (1982) p. 354 argues that individual preferences will determine how liberal a society will be, and that assigned rights are redundant. It can be argued that without assigned rights, no society will be liberal enough to have any rights, i.e., that the domain restrictions necessary to guarantee meaningful rights are so severe that they stretch credulity.

Blau (1975) noted that 'meddlesomeness', or 'nosiness' of individual preferences is what generates the conflict between liberalism and the pareto rule. An agent is meddlesome if he or she is more intensely concerned with the outcome of the issue controlled by another agent than with the outcome of the issue he or she controls. Blau (1975) measures intensity by the relative position of social alternatives in an ordinal ranking. Since Agent 1 ranks  $x$  and  $y$  farther apart than he or she ranks  $x$  and  $z$ , the alternatives controlled by Agent 2, Agent 1 has a more 'ordinally intense' preference for the choice between  $x$  and  $z$ , the choice

Agent 2 controls, than for the choice between  $x$  and  $z$ , since  $x$  and  $y$  differ only in the outcome of the issue controlled by Agent 2, by the assignment of rights. In a similar manner, Agent 2 is meddlesome.

An obvious way to eliminate the conflict, then, is to simply ban meddlesome preferences. If one believes that meddlesomeness occurs rarely, this restriction is not severe (Sen, 1976, p. 233). Individuals do not live in isolation, and often things that others do that are 'none of our business' may disturb us quite a bit. If an individual paints his or her house pink, meddlesomeness among neighbors is likely to arise. The outcomes of many issues that do not affect us directly can cause us pain or joy, i.e., they create 'external effects'. If, as Craven suggests, we only have rights in society if individuals have preferences conducive to permitting them, one would expect few 'rights' to exist. Indeed, rights are 'guarantees' of individual sovereignty, to some extent, *because* opposition to the exercise of them often exists.

Other suggested restrictions on the domain of individual preferences are less severe than banning meddlesomeness, but are still stringent. Seidl (1975) requires that individual preferences have *maximal tolerance*, i.e., individuals are indifferent between social states that differ only in the outcomes of issues that are controlled by someone else. This neutralizes meddlesomeness.

Breyer (1977) refines Seidl's approach by introducing extremely liberal preferences. A person is *extremely liberal* if he or she chooses between social states solely on the basis of the outcome of the issue he or she controls. When the outcome of this issue is the same in two social alternatives, there is no restriction on the individual's preferences; it need not be indifference in this case. Breyer (1977) shows that the paradox cannot arise if  $n - 1$  of the  $n$  individuals in society are extremely liberal, and have separable preferences. This restriction is weaker than Blau's or Seidl's, but still quite limiting, since it demands a great deal of conformity among individuals; all but one person must be strongly committed to the one issue they control.

Breyer and Gigliotti (1980) have developed a weak restriction on preferences that eliminates the paradox. They define empathetic preferences:

*Empathetic Preferences:* A person,  $k$ , has empathetic preferences if, for

any pair of  $j$ -variant states,  $(x,y)$ , over which an individual  $i$  is decisive:  
 $xP_i y = > xP_k y$ .

An empathetic person always agrees with whoever is decisive between two  $j$ -variant states. As Breyer and Gigliotti (1980) prove, if all individuals have separable preference and *at least one* individual is empathetic, there is no conflict between liberalism and the pareto rule. (This is a companion result to that of Sen, 1976, which requires that one individual 'respect the rights of others', or be 'liberal', by restricting his own preference ordering to avoid any 'illiberal attitudes'. Sen's approach requires a restricted version of the Pareto rule. See Austen-Smith, 1982, for further developments in this direction. Also, see Craven's discussion of the 'green and yellow socks' example on p. 356, which is an example of empathy.)

The existence of an empathetic individual shows that *even if we assign rights*, if there is *ONE* 'saintly' individual in society, rights and the pareto rule do not conflict. We can have a liberal society if we can only find *ONE* person with the 'right' preferences.

When a domain restriction is used to remove the paradox, we are saying: If 'enough' individuals are tolerant 'enough', rights and the pareto rule are compatible. We have seen above that how many individuals must be tolerant and just how tolerant they must be depends on the structure of preferences. One person can be enough, if he or she has the 'right kind' of preferences. How do these results differ from those of Craven? In the above examples, using a domain restriction has led us to a conclusion similar to Craven's, but *with* assigned rights. Does it matter if rights are assigned or not?

### 3. WHAT DO WE MEAN BY 'RIGHTS'?

When a domain restriction is used to remove the paradox, we are claiming: If 'enough' individuals are tolerant 'enough', liberalism will prevail, i.e., individuals will be able to make some choices for themselves with no interference from anyone else, and the weak pareto rule will hold. ('Enough' individuals and 'enough' tolerance are implied by the structure of preferences.)

A society that permits individuals to do what they please, at least for some actions, because everyone agrees they should does not seem very

'liberal' or tolerant unless the actions individuals take are in some sense hard for others to bear, that is, unless there are some external effects to consider. Freedom of speech is a *right* and requires protection precisely because some individuals will say things others prefer not to have said. As Blau (1975) noted, the paradox only arises when preferences are 'meddlesome'. So, if no one is 'nosy', we will not have any conflict between rights and the pareto principle. But to say that a society gets the rights its people 'prefer', in the manner Craven suggests, is to misapply the word preference. Often, individuals will support rights in a constitution, even though they do not prefer the outcomes the exercise of those rights will generate.

As Sen (1983) has noted, restricting the domain the collective choice rule to exclude certain preference profiles resolves the conflict, but leaves two questions begging: What do we do if preferences are not of the required form, and How do we (Should we?) encourage the formation of individual preferences so that they are 'liberal enough'? Craven's comments hint that liberal individuals will live in liberal societies. But can we encourage the formation of liberal societies without violating the idea of a liberal society? Can education do the job without being 'coercive'? Is there a more fundamental paradox: Liberal preferences cannot be formed through education and value formation without coercion?

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