Bad Advice
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Source: *Economic and Political Weekly*, Vol. 27, No. 10/11 (Mar. 7-14, 1992), pp. 525-527+529-530
Published by: Economic and Political Weekly
Stable URL: http://www.jstor.org/stable/4397696
Accessed: 25-09-2017 17:37 UTC

Bad Advice

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The economist's traditional model is that of a soundless economy. If individuals suddenly lost their ability to speak, nothing would happen to this economy because their ability to speak was never a part of its assumptions. Yet in reality speech matters, not only in itself but because it influences the world of action. This paper shows that the link between the world of speech and the world of action is as yet ill-understood and its understanding is important for the social sciences. It argues, for instance, that the advice of economists has had insufficient impact on actual policy not so much because of the inadequacy of the contents of the advice as because of our ignorance of how to give advice. Some of the existing work on speech and action—for instance, that on 'cheap talk' games—is critically examined and a preliminary outline of a theory of policy advice is sketched.

I

Words, Actions and the Law

THIS essay is about the links between the world of speech and advice, on the one hand, and the world of action on the other. The economist's traditional model—for instance, the Arrow-Debreu one—functions in complete silence. It is a soundless economy. If individuals suddenly lost their ability to speak, nothing would happen to this economy because the ability to speak was never really a part of its assumptions.[1] Yet we know that communication matters a lot, not only in itself but because it influences the world of action.[2] If we did not have phones, faxes and the ability to write, it is arguable that neither would we have cars, aeroplanes and the smallpox vaccine.

The link between speech (or, more generally, communication) and action is an extremely difficult terrain of research, as is evident from the small, recent literature on the subject. The purpose of this paper is to persuade the reader that this link is as yet ill-understood and that its understanding is important for the social sciences. As yet, I have no formal theorem or definite claim to offer, and this paper is best viewed as a prelude to such a formal exercise. The paper is based on the belief that the advice of economists has had insufficient impact on actual policy not so much because of the inadequacy of the contents of the advice as because of our ignorance about how to give advice. This is an area where there is not just scope for inter-disciplinary research but a need for it. Though this paper is written from an economist's point of view, there is as much for a specialist in linguistics, the psychologist and the game-theorist to offer here as for the economist.

Let me illustrate with two examples how our usual beliefs about the link from words to action is inadequate and possibly faulty. Consider the standard economist's model of general equilibrium, for example, the Walrasian or Arrow-Debreu one. What is usually not realised but is true is that in such a model there is no scope for policy advice. In this model each agent is fully informed,

has his own objective and chooses and behaves so as to attain it (in the economist's language, he chooses from his feasible set to maximise his utility). Hence what agent i *says* never influences what agent j *does*. Therefore what the *economist* says also cannot affect what people do if the world is of the above kind because the economist is after all just another agent in the economy. This is a simple enough point, but barring a few exceptions [for example, Barro, 1984; Bhagwati, 1984], it seems to have been misunderstood. This has led to inconsistencies. Thus there are economists who use the standard textbook model to analyse the economy and then offer advice as to what ought to be done to improve the performance of the economy, not realising that either their advice is futile or their model is wrong.

In reality advice does play an important role because agents are not fully informed and their objective in life (or the utility function) is susceptible to influence. However, this does not mean that advice influences action in the straightforward way of inducing an agent to do X when he is advised to do X. It is entirely possible that when he is advised to do X, he will do the opposite or something unrelated to X. Hence, at times, to bring about the right kind of world it may be necessary to give the 'wrong' kind of advice!

The above is an unfortunate fact of life, but it needs to be recognised if we wish to understand why our advice so often fails. I return to this subject in Section III.

The second example concerns law. Consider the contemporary view of the role of law in regulating an economy. According to this, what a new law does is to alter the 'payoff functions' of agents (i.e, the payoffs or utility levels that individuals attain in different states of the world). Suppose a new legislation says that, if a person's car emits pollutants above a certain level, the person will have to pay a penalty. At first sight it does seem that this alters the payoff functions of the 'players' in the economy. After all, if a person's car generates pollutants excessively, he has to pay a penalty and therefore would have a lower utility level (or,

equivalently, get a smaller payoff) than what he would have had if the legislation did not exist.

The fallacy behind this view stems from the presumption that the government is somehow exogenous to the economy and is run by agents who habitually enforce the law. Then, if we think of the 'economy game' as one which is played by only the non-governmental individuals of the economy, of course the game and the payoffs are altered by the law. If a person chooses to pollute, in the post-legislation situation, his payoff *is* lower, because the agents of the exogenous government (e g, the policeman and the judge) fine him.

Once we disabuse ourselves of such a piecemeal view of the economy and think of all citizens, including the policeman and the judge, as players, it is not clear that a law changes the game being played or the payoff functions of the players. After all, a legislation is some ink smeared on paper. If all players decide to ignore the ink, then the situation after the enactment of the law is no different from the one before. Hence it seems to me that a law does not change the game. Its influence, if any, is on the solution or the outcome of the game. It creates focal points, influences the beliefs of players, including their beliefs concerning other players' beliefs; and through these can influence the outcome of the game.

To elaborate on this, return to the example of the anti-pollution law and suppose that it makes motorists control the level of emission from their cars. But a *homo oeconomicus* or a self-seeking rational agent would not control emission just because that is the law. He does so because that being the law he expects that the policeman will fine him if he causes excessive pollution. But this raises the question as to why the policeman will fine him if he breaks the law. If the policeman is a *homo oeconomicus*, the reason must be that the policeman, in turn, expects that if a motorist violates the law and he does not book him, then he himself will get sentenced by the judge. And so on. The law works (that is, if it does) in a society of selfish utility maximisers because it creates an interlocking web of self-fulfilling

beliefs.[3] If for some reason such beliefs do not arise, then the law would be ineffective because, in itself, a law has no force. Indeed, in India often when a rich and a powerful person commits some crime, it is expected that the enforcers of law will look the other way (it must be stressed that a consistent use of my argument requires us to recognise that the enforcers of law look the other way not because they are especially wicked but because in their situation that is what any self-seeking person would do). This is the reason why so much of our legislation is impotent, or worse still opportunistic, in the sense that it is invoked only against certain persons and sections of society.

It is important to recognise this aspect of the law and it is arguable that it is our deficiency in the understanding of the relation between the enactment of law and human action that is partly responsible for the inadequate, and probably deteriorating, functioning of the law in the Indian economy. I shall not address the subject of law and action explicitly any more in this paper but it is an important special case in the study of the link between communication in general and action and hence what follows is both motivated by the above discussion and may be viewed as provocation for more research on the subject.

II

The Neutral Adviser

When an adviser has his own values and preferences over the actions of the advisee, there arises special complications in deciding what constitutes 'good advice'. I have discussed some of these in an earlier paper: Basu [1992]. It is an area where it is easy to get misled into fallacies as Srinivasan's [1992] response to my paper illustrates. I shall come to some of these issues later.

Let me for now confine attention to a simple case which is nevertheless of considerable practical interest. This is the case where there is an advisee and *value neutral* adviser. The adviser has to make recommendations to the advisee as to what he should do. Being value neutral, he tries to give the advice which *if* followed will bring about the kind of world that the *advisee* wants.

The doctor as an adviser to a patient comes close to this case. When a doctor prescribes medicines to a patient (that is, his advisee) his aim is to do for his patient what the patient wants, usually to get well. There are of course exceptions to this. If the doctor happens to be a landlord and the patient his tenant who refuses to quit his rented apartment the patient may be well-advised not to take the prescribed medicine.

The economist is not typically value neutral since he has his own views about what sort of an economy is desirable. But let me abstract from this for the time being and assume value neutrality in this section.[4]

In this set-up it seems reasonable to describe an *advice* as *good* if the advice is something that is possible for the advisee to

follow and, if he follows it, then the kind of society that emerges is what the advisee wants.

A *bad advice* is the complement of this. It is useful however to separate out different kinds of bad advice because there is a common tendency among human beings to think of only a certain kind of bad advice as bad. I shall here distinguish between three kinds of bad advice: 'wrong advice', 'infeasible advice' and 'no advice'.

A *wrong advice* is an advice which, if followed by the advisee does not bring about the sort of change that the advisee seeks. The pre-Keynesian advice that during depressions individuals should save more was therefore wrong advice because (or allegedly because) greater savings, we now know, exacerbate economic slumps. As economists in India today battle about the kind of restructuring that is desirable the charge most often heard is that 'your advice is wrong'. Thus when one economist tells another that she is mistaken about devaluation being desirable because devaluations in fact do not improve balance of payments, he is making this kind of charge.

However, I believe that our advice is often bad not so much because it is wrong as because it is 'infeasible'. An *infeasible advice* is one which is impossible for the advisee to follow. When we tell a politician to lower the prices of goods, it may be good if it were followed, but it is bad advice because it is impossible. The politician would typically not survive as politician to carry out the advice. The 'infeasibility error' is a common one that economists, journalists and the laity, for that matter, make when drawing up interminable lists of things that the decision-maker ought to do.

There is however an interesting dilemma here. An advice which is infeasible when one person recommends it, may become feasible when many recommend it. If one person pushes for a policy which would give more to the poor this may be infeasible for the prime minister to implement because the rich lobby around the PM would thwart it. If, however, millions of people ask for the same, the PM, is likely to be able to persuade the rich to give around in the light of the enormous pressure and in the interest of stability. This problem has another side to it because it is not necessarily predicated upon the one-and-many dilemma. It is not uncommon in a family with two siblings for a parent to tell one of them 'I know your sister is being unreasonable in demanding the chocolate but you know how she is, so please give it to her', and thereby to actually get him to part with the chocolate. It is possible that in the absence of the sister's tantrums it would be infeasible for the parent to get the chocolate out of the brother. So what is feasible for an advisee *may* in some situations depend on what the adviser recommends. Was it not George Bernard Shaw who said that a rational person is someone who realises that he cannot change the world, and the world

changes because of irrational persons?

Returning from these exceptional cases to the general problem of infeasible advice, it is worth emphasising that infeasibility does not simply refer to technical possibilities. In seminars one often hears an academic saying "I know how our debt problem can be solved..." or "It is easy to remove poverty...". If you turn round and ask him why he does not in that case solve our debt problem and remove poverty, he will point to how others would not allow it. The bureaucrats would block him and the media will give adverse publicity, etc. The mistake that this academic is making is not to realise that infeasibility can take a myriad forms and if there are people who will foil his plan then his plan is not quite the simple and obvious one that he made it out to be.

By far the most popular kind of bad advice is what we shall here call *no advice*. This is the case when it is not clear *how* an advice can be followed. Remarks of the following kind are common: 'If you want to improve literacy you must have a more equitable income distribution.' This advice is not very useful because in trying to tell you how to achieve literacy the adviser suggests that you achieve something else which is equally or perhaps more difficult. Thus people who tell you that you should go for a 'total overhaul of the system', when you ask them how to control the fiscal imbalance are offering you no advice. An advice should ideally take the form of a clear suggestion of an action from among the set of actions feasible to the advisee. But, in India the malaise of 'no-advision' is extremely widespread.

III

The Strategy of Advising

The problems of advising increase manifold once we allow the adviser to have his own preferences about what is a desirable world. To break the problem of futility of advising in an Arrow-Debreu world, discussed in Section I,[5] it is necessary to admit that the advisee has less than perfect information. This imperfection in information could arise because of some inherent uncertainty like that associated with nature or the uncertainty stemming from the problems of co-ordination among agents in a strategic environment. Most of the recent literature on 'cheap talk' games—referred to in note 2—pertain to the latter. When there is asymmetric information between agents there is scope for one person's talk to influence another's actions. But if, unlike in Section II, the agents have their own distinct preferences, some paradoxical possibilities crop up. Let us begin by discussing one such possibility as is illustrated by Stein's [1989] model.

Stein's paper supposes that if individuals know the targets (concerning, for example, the future increases in money supply) of the Federal Reserve Bank, this will influence their behaviour. It is also possible that it will

influence their behaviour in a way which is considered undesirable by the Fed, that is, in terms of the Fed's social welfare function. It may seem therefore that if the Fed is really committed to the social welfare function it should lie about its targets, in particular, announce those targets which would induce the most desirable behaviour on the part of the citizens. But in Stein's model this may not be possible because individuals know that the Fed would like to mislead them. What is more interesting is that, given such knowledge on the part of the citizens, it may be impossible for the Fed to convey its real targets to the people, even if it wanted to do so. In Stein's model, it so happens, that the problem gets resolved by allowing the Fed to make *vague* statements about its target, because there exists a vague statement which is true and in stating which the Fed has no interest in creating strategic misinformation. The model gives important insights into why the statements of politicians and bureaucrats are so often ambiguous or vague [see also Alesina and Cukierman, 1990].

Stein's model studies the link between statements of *fact* and behaviour. Similar problems arise even when the statements in question are purely prescriptive. This is because if j knows i's values and preferences and hears i make some prescriptions, he can *deduce* information from this and this can influence his behaviour. This immediately opens up the possibility that i may face a dilemma between making the prescription he believes in and making a prescription he does not believe in but which helps in bringing about the kind of world he believes in. This is a genuine dilemma which all policy-makers and advisers have to face. What makes the dilemma hard is that it is not a conflict between selfishness and morality but even if one decides to be honest about one's beliefs it is not clear as to what the right course of action is.

Though the causation there is very different, in psychotherapy there is a school of thought that believes that certain unwanted habits can be cured by making a prescription which is the reverse of the real one (Watzlawick, Beavin and Jackson's [1967] discussion on 'Prescribing the Symptom'). It seems, for instance, that bed-wetting can be stopped by telling the person afflicted with this problem to wet his bed in his sleep. (To dissuade the experimentally-inclined reader, I hasten to add that this is not a matter free of dispute among psychotherapists!)

If in addition to these differences in the preferences of the adviser and the advisee, their asymmetric information happens to be common knowledge, it may become impossible for one person's words to influence another person's actions.[6] Let me illustrate this with an example. I have discussed this elsewhere [Basu, 1992] and would not have repeated it here if it were not for the fact that it is easy to misunderstand.

The minister (or government) has to choose between two projects, L and R. His aim is to choose the project which will maxi-

mise *his* welfare. The trouble is he does not know which, of L and R, will do so. His adviser, through his sophisticated econometric analysis, knows this but he wants to implement the project which is good for the people (since his own welfare is not affected one way or the other). Being an adviser his job is to say 'Do L' or 'Do R'. The problem may be stated more formally by assuming that one of two social states, i_1 and t_2, is chosen by nature. If t_1 occurs, L is better for the minister (his payoff is 1) and worse for the people (whose payoff is zero) and if, t_2 occurs, R is better for the minister. The probability of t_1 occurring is 1/2.

This information is summed up in the chart describing game G_1. An alternative description in the form of a game tree is easy to construct (see Game G_1).

GAME G_1

. Minister			Minister	
L	**R**		**L**	**R**
0,1	1,0		1,0	0,1
t_1			t_2	

In each box the right-hand figure is the minister's payoff. The adviser observes whether t_1 has occurred or t_2 and then says 'Do L' or 'Do R'. The minister does not observe the social state but he hears the adviser. The minister then chooses between L and R.

It is easy to see that in equilibrium both agents' behaviour will be such that no one will be able to deduce anything from the other. In particular, it will be impossible for the adviser to transmit any information to the advisee.

In response to my earlier discussion of a similar example, Srinivasan [1992, p 164] has the following to say:

. . . [D]oes it mean there is no point in advising the government? Surely not. Let me illustrate this with the Basu et al Nash equilibrium story [the reference here is to Anant, Basu and Mukherji, 1992]. It can easily be shown that the Nash equilibrium is not Pareto optimal [. . .] Bringing this to the notice of the government may induce it to think of less inefficient ways of raising revenue. More to the point, the lesson I draw from the Friedman story [the reference being to Friedman, 1986] and others is that in designing a system of government a rule-based rather than discretionary exercise of policy is likely to be socially desirable, given that any discretion is likely to be exercised to pursue the self-interest of the bureaucrat.

I find this paragraph by Srinivasan extremely valuable because it illustrates in a short space several fallacies. Note first that the belief that Pareto suboptimality simply has to be pointed out for it to get corrected is not true. Then Cournot equilibria would not be sub-optimal neither would the Prisoner's Dilemma occur. Moreover, the whole point of my example was one where it was not in the adviser's interest to feed the correct information to the minister or the

government. Moreover, switching from a discretionary system to a rule-base one may solve the problem of bureaucrats using the *discretion* to their own advantage; but it will create a new problem in which the *rules* are chosen to benefit the ones who draft the rules (quite apart from the additional problem of the rigidities of a rule-based bureaucracy). Hence, contrary to Srinivasan's assurance the problem of communication between the advisee and a non-neutral adviser is indeed a very difficult one.

Does this mean, as Srinivasan asks, there is no point in advising the government? The answer is in the negative, but not for the reasons that Srinivasan gives. Srinivasan's confusion stems from his inability to grasp fully the meaning of an 'endogenous government'.[7] Note first that if the government consisted of fully-informed, self-seeking agents, then there would indeed be no room for advice as Barro [1984] had observed. Also if the government was less than fully-informed but if the adviser's objectives were orthogonal to that of the government and this was common knowledge as in the above game, G_1, advice again would be futile. But if neither of these is true, advice can influence actions. However, the adviser may have to confront a dilemma between saying what he believes in and bringing about the kind of world he believes in.

IV

Cheap-Talk

The pathologies which arise in the link between advice and action were illustrated thus far in contexts exhibiting *intrinsic* uncertainty, for instance, that arising from uncertainty about nature. It may legitimately be asked as to what happens in the case where the uncertainty is not inherent but arises from the problems of co-ordination between individuals. After all, this is the kind of uncertainty that occurs in cheap-talk games, which have spawned a substantial literature in recent years.

I shall try to argue that the "talk" that occurs in cheap-talk games is more problematic than conventionally supposed. But this is a fairly formal area and it may be useful to begin by recapitulating the basic ideas. I do this by using the model of Farrell [1988].

Consider the game of the *Battle of the Sexes* described below:

GAME G_2

		Player 2	
		A2	**B2**
Player 1	**A1**	2, 1	0, 0
	B2	0, 0	1, 2

In this game the two players, husband(2) and wife (1), have to decide c.1 whether to go for a bull-fight (B) or an art exhibition (A). They are friendly enough to want to go to the same place, though the husband prefers that both go to the bull-fight (B_1, B_2), in which

she gets a payoff of 1 and he gets 2. If they choose (A_1, A_2), she gets 2 and he gets 1. If they go to different places they get zero each. This information is summed up in the payoff matrix above.

This is a game of pure co-ordination. It has two (pure-strategy) Nash equilibria, (A_1, A_2) and (B_1, B_2). If a player believes the other is playing B it is in his or her interest to play B. Likewise for A. In this game if there is no preplay communication, it is believed that (A_1, A_2) or (B_1, B_2) can happen. And in fact if mixed strategies are allowed or we use the criterion of rationalisability [Bernhaim, 1984; Pearce, 1984] then anything can happen.

If however player 1 is allowed to make a pre-play suggestion as to what they should play, it is reasonable to expect that he will suggest (A_1, A_2) and given such a suggestion no one has an interest in unilateral deviation. So cheap talk or pre-play communication gives us the intuitively expected outcome. If 2 had made the pre-play suggestion, we should expect (B_1, B_2') to occur. More generally and going beyond the above example what Farrell does is the following. He defines a *suggestion* to be an n-tuple $(T_1 \ldots T_n)$ of strategy sub-sets, where T_i is a subset of $M(S_i)$ where S_i is the set of pure strategies open to player i, and $M(X_i)$ is the set of all mixed strategies with support X_i which is a subset of S_i.

A *consistent suggestion* is defined to be a suggestion, $(T_1, \ldots, T_n)$ such that for all i for all strategy b in T_i, there exists a strategy n-tuple m in $T_1 \times \ldots \times T_n$, such that b is a best response to m. In the language of Pearce [1984] a consistent suggestion is a suggestion which has the 'best response property'.

In keeping with the nomenclature of this paper, let me call the player who makes the suggestion the 'adviser'. It is argued in this literature that *if the adviser makes a consistent suggestion, all players will abide by it.* Knowing this the adviser will make that suggestion which is the most advantageous to him. This is predicted to be the outcome of a game with pre-play talk. Let me here call this an *equilibrium.*

I wish to draw attention to two difficulties with the above argument. The first one pertains to the italicised observation in the above paragraph. Consider the game described below which is taken from my paper with Jorgen Weibull [Basu and Weibull 1991].

GAME G_3

		2 L	R
1	T	2, 2	0, 0
	M	0, 1	1, 1
	B	0, 0	0, 2

In this game (M,R) is a Nash equilibrium. Hence ([M], [R]) is a consistent suggestion. Suppose player 1 is the adviser and the adviser suggests ([M], [R])—that is, that 1 should choose M and 2 should choose R.

Is it reasonable to expect that both players will listen to the suggestion? This is not so obvious. If 2 believes 1 will follow the suggestion, 2 is indifferent between L and R. Hence, his playing L cannot be ruled off hand. In view of this 1 may think of playing T. This in turn may induce 2 to play L. It seems therefore that a consistent suggestion need not be self-enforcing. For suggestions to be self-enforcing it seems more reasonable to look among what in Basu and Weibull [1991] is described as a 'curb set' where CURB is an acronym for being 'closed under rational behaviour'. In particular, a suggestion $(T_1, \ldots T_n)$ is *tight curb* if, for all i, T_i is the set of all best responses of player i, to $(T_1, \ldots T_n)$.

It seems to be sensible to argue that suggestions which are tight curb sets are more likely to be self-enforcing than ones which are consistent. But even after this adjustment there is a deep problem.

Return to example G_3. Is the announcement of the suggestion ($[A_1]$, $[A_2]$) really necessary for (A_1, A_2) to happen? If this is the *only* reasonable suggestion on the part of player 1 it is not clear why *making* the suggestion is at all important.

In other words, whenever a cheap-talk game with a pre-specified adviser has a unique equilibrium, it is not clear why the advice needs to be given. The fact that there is only one reasonable advice to give and all players can deduce this, obviates the need for the advice. Actual words, it seems, once again cannot influence action.

On the other hand, suppose player 1 suggests ($[B_1]$), ($[B_2]$). This is consistent and also tight curb. So, according to this model, all players would be expected to abide by it. But note that 1 suggesting this, given that he *could* have suggested ($[A_1]$, $[A_2]$) reflects nothing as much as 1's irrationality. Since this will be transparent to 2, it is no longer clear as to why if ($[B_1]$, $[B_2]$) is suggested, the players will abide by it, since 2 seeing 1's irrationality will be thrown into confusion.⁸

So if a suggestion is obvious it is not clear why it has to be made; and if it is not something that is optimal from the adviser's point of view, its announcement should cause nothing but confusion.⁹

V

Conclusion

In an engaging essay, Friedman [1986] admitted that his efforts to persuade the Federal Reserve to adopt a certain set of policies had been "a waste of time". This was not because his advice was wrong. In fact, Friedman believes that *if* the Fed had followed his advice, "the economic situation of the United States and of the world would be [. . .] far preferable". His advice was a waste of time because it was wrongly given and it was but inevitable it would not be accepted. I take the view in this paper that this is a very general problem with the advice we economists give. Where we more frequently err on is not the *content* of the advice but

the mechanics of *how* to give it. What we need is a theory of how an advice gets translated into actions.

The aim of this essay was to prepare the ground for such a theory by demolishing the simplistic views that prevail concerning what constitutes good advice and, by complementarity, bad advice. It was shown that the link between advice and action is complicated and can exhibit pathologies which result in some deep dilemmas for the adviser.

This sounds like a pessimistic note to end on. But I read it more as a sign that we are on a terrain which is both interesting and difficult and, therefore, as research agenda has much to commend.

Notes

1 It is possible to argue that some of the assumptions are motivated by the presumption that agents do communicate. However, since these are not explicit, we cannot use the model to discuss the role of communication or the impact of a new invention facilitating communication, for example, the fax machine.

2 The emerging literature on this subject distinguishes between two kinds of communication: Payoff-effecting communication and costless communication. If you get some inherent joy in giving advice then it is a 'payoff-effecting' communication because the communicator's payoff is influenced directly by his act of communication. The same is true of a student who has to incur the cost of studying in order to do well in the GRE examination and thereby communicate to the world his talents. Spence [1974] is a classic work in this class. Costless communication is the case where the communication in itself is free. Of course, it may ultimately influence the communicator's payoff by influencing the actions of others. The literature on this is relatively recent [Crawford and Sobel, 1982; Farrell, 1988; Rabin, 1990, to name just a few]. Such communication is usually referred to as "cheap-talk". All my reference to communication in this paper is to cheap-talk.

3 The role of interlocking webs have been used to explain special customs and political regimes [see Basu, 1986; Basu, Jones and Schlicht, 1987; Platteau and Abraham, 1987]; but it seems to me that its role in the functioning of the economy may be more pervasive than previously believed; in particular, as just argued, the efficacy of law may depend critically on it.

4 If there is an active market for advisers, and

advisers and advisees meet repeatedly over time, then no matter what the innate preferences of the adviser it may be in his interest to *act* value neutral because then his advice will be the most sought after and he would be able to command a large fee.

5 See also Friedman [1986], Basu [1992], Dasgupta [1992].

6 In fact this problem can arise even when the. adviser and the advisee have identical preferences, as illustrated by the E-mail game discussed in an extremely illuminating paper by Rubinstein [1989].

7 A useful reference for averting errors of this kind is Bhagwati [1988].

8 The problem is analogous to the well known problem of 'unreached nodes' in extensive-form games [Binmore, 1987; Basu, 1990].

9 Hence pre-play suggestions have, at best, the slender role of tie-breaking when the adviser has two or more equally advantageous consistent suggestions.

References

Alesina, A and Cukierman, A (1990): 'The Politics of Ambiguity', *Quarterly Journal of Economics*, Vol 105.

Anant, T C A, Basu K, and Mukherjee, B (1992): 'A Model of Monopoly with Strategic Government Intervention', mimeo, Delhi.

Barro, R J (1984): 'Discussion of Sargent's Paper', *American Economic Review*, May, Vol 74.

Basu, K (1986): 'One Kind of Power', *Oxford Economic Papers*, Vol 38.

— (1990): 'On the Non-Existence of a Rationality Definition for Extensive Games', *International Journal of Game Theory*, Vol 19.

— (1992): 'Modelling Government Behaviour and Endogenising Policy' in S Jha and K Parikh (eds), *Methods of Planning and Policy Analysis for Mixed Economics*, Allied Publishers, forthcoming.

Basu, K, Jones, E and Schlicht, E (1987): 'The Growth and Decay of Custom: The Role of the New Institutional Economics in Economic History', *Explorations in Economic History*, Vol 24.

Basu, K and Weibull, J (1991): 'Strategy Subsets Closed under Rational Behaviour', *Economics Letters*, Vol 36.

Bhagwati, J (1984): 'Comment on Raul Prebisch's Paper' in G M Meier and D Seers (eds), *Pioneers in Development*, Oxford University Press.

— (1988): 'The Theory of Political Economy, Economic Policy and Foreign Investment', mimeo, New York.

Binmore, K (1987): 'Modelling Rational Players, I', *Economics and Philosophy*, Vol 3.

Crawford, V and Sobel, J (1982): 'Strategic Information Transmission', *Econometrica*, Vol 50.

Dasgupta, D (1992): 'Comments on "Modelling Government Behaviour and Endogenising Policy" ' in S Jha and K Parikh (eds), *Methods of Planning and Policy Analysis*

for Mixed Economies, Allied Publishers, forthcoming.

Farrell, J (1988): 'Communication, Coordination and Nash Equilibrium', *Economics Letters*, Vol 27.

Friedman, M (1986): 'Economists and Economic Policy', *Economic Inquiry*.

Platteau, J P and Abraham, A (1987): 'An Enquiry into Quasi-Credit Systems in Traditional Fishermen Communities', *Journal of Development Studies*, Vol 23.

Rabin, M (1990): 'Communication between Rational Agents', *Journal of • Economic Theory*, Vol 51.

Rubinstein, A (1989): 'The Electronic Mail Game: Strategic Behaviour under Complete Uncertainty', *American Economic Review,* Vol 79.

Spence, A M (1974): *Market Signalling*, Harvard University Press.

Srinivasan, T N (1992): 'Comments on "Modelling Government Behaviour and Endogenising Policy" ' in S Jha and K Parikh (eds), *Methods of Planning and Policy Analysis for Mixed Economies*, Allied Publishers, forthcoming.

Stein, J C (1989): 'Cheap Talk and the Fed: A Theory of Imprecise Policy Announcements', *American Economic Review*, Vol 79.

Watzlawick, P, Beavin, J H and Jackson, D D (1967): *Pragmatics of Human Communication: A Study of Interactional Patterns, Pathologies and Paradoxes*, W W Norton.

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