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Corporate Intention and Corporate Action

Abstract: This paper comments on Coleman's account of group action (or corporate action, in his terminology), and his view is compared with the present author's largely complementary view (e.g., Tuomela 1993). Some criticisms concerning Coleman's linear system of action are presented. One of the main points made is that a viable theory of social action must make use of a notion of joint intention and that Coleman's theory is deficient on this score.

1. Introduction

Professor James Coleman's book *The Foundations of Social Theory* is a great achievement: It presents a general but precisely formulated social theory based partly on long-term theoretical work and in part also on empirical work. I find myself largely in agreement with what Coleman says; accordingly, most of my critical points will be 'external'. The chief purpose of this paper is therefore not so much to criticize as to attempt to say something which complements Coleman's theory and also serves to show some of its limitations and restrictions. As a philosopher, I will concentrate on conceptually and philosophically interesting issues. Because there are a great many such issues in the book, I have chosen to concentrate on the topics of group action and group intention, topics I have myself worked on recently.

2. Corporate Actors

We can distinguish between collective action (behavior) by the members of a collective and action performed by the collective. Coleman is concerned with both in his book. However, in the case of actions performed by collectives he is mainly concerned with 'corporate actions', actions performed by corporate actors.

What are corporate actors according to Coleman? I have not found a very explicit and unambiguous answer in the book. The index is not very helpful here. While the problem does not need a precise solution for our present purposes, something must be said. The notion of a social collective in the broadest possible sense covers social groups (in one or another of the senses social psychologists speak of them), organizations, business corporations, economic classes, nations

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and even social classes defined with respect to one or more features (e.g. red-haired females). Obviously, not all social collectives can act (some social classes, for instance), but some can. Thus social task groups and business corporations surely can, at least in principle. While Coleman's corporate actors definitely include business corporations and the like it is not quite clear to me what his notion involves. Maybe we can regard a corporate actor as a collective capable of action *qua* a collective. This involves representation – in the sense of the existing persons acting for the collective – and collective control of rights and obligations (viz. in the typical case the transferral of group members' rights to representatives – or 'agents' in Coleman's terminology). Coleman says that a "minimal corporate actor is created when principal and agent are two different persons" (Coleman 1990, 421). Here acting by representation seems criterial, because Coleman means by an agent a representative. In another place he says that a corporate actor is a collective with positions to which rights and obligations as well as goals and expectations are connected. The structure of positions is fixed by central management to bring about the achievement of certain goals, which constitute the purpose of the corporate actor (450). He also says that if the structure is well designed, these pursuits will achieve the purpose of the corporate actor.

To summarize, for Coleman a corporate actor is a social collective which at least in the central case must have social positions with related rights and duties and with some collective control over those rights and obligations. Furthermore, a corporate actor has or can have purposes and can act so as to satisfy them. While formally organized collectives such as Ford Motor Company clearly are corporate actors, it is not clear how informally characterized and/or unstructured social collectives should be classified. Coleman indicates that, for example, a family in some cases is not a corporate actor. Perhaps he then accepts only cases in which positions, structures, and the controlling management are characterized in explicit (or, as social scientists say, 'formal') terms. As my critical points will in any case apply to his analysis of Ford Motor Company and similar paradigm-cases of corporate actors, it is not necessary to press the point here. Let me note only that in my own view, to be briefly considered later in the paper, actions performed by social collectives are called group actions, and – to simplify slightly – collectives which can act (or at least form intentions to act) are called social groups. This (at least seemingly) broader characterization obviously does not require explicitly characterized social positions or a central management, although the existence of a system of group intention formation (a kind of group decision-making system), however informal, is presupposed.

3. Coleman's Linear System of Action

In formulating his mathematical theory of action, called the linear system of action, Coleman relies heavily on mathematical tools and conceptual ideas adopted from economics; e.g., the notions of utility maximization, transaction of goods, and equilibrium states receive emphasis. Coleman presents the mathema-

tized version of his theory of action in Chapter 25 and elaborates it in subsequent chapters. I will here touch on some notions that my critical purposes will require.

In Coleman's system – as presented in Chapter 25 – an actor is treated as a purposive, unanalyzed entity characterized by a utility function that he seeks to maximize. The analysis starts with actors, goods, control, and interest and proceeds to derive the competitive equilibrium for a system with n actors and m goods. The amount of good j held by actor i is denoted by c_{ij} and his utility function (assumed to be a Cobb-Douglas function) is: $U_i = U_i(c_{il},...c_{im})$. The assumption that the utilities are Cobb-Douglas utilities gives us $U_i = c_{il}^{xli} * ... * c_{im}^{xmi}$ where x_{ji} are parameters which add up to unity and which express the contribution that good j makes toward the utility of individual i. We may also speak of x_{ji} as expressing i's interest in good j. The aggregation of interest is needed for micro-to-macro transition – a problem discussed in later chapters. Interests are conceptualized as the springs of action guiding the actor.

In addition, Coleman uses the system-level notion of value (v_j) or 'price' of a good j in exchange. It is assumed that $v_j = \sum_i x_{ji} r_i (i = 1,...,n)$. Here r_i is the power or wealth of individual i. Both power and value are system-level notions. What quantity of c_{ij} is held at competitive equilibrium is obtained by means of the principle of maximization of utility.

Only 'perfect social systems' are the subject matter of the linear system of action. According to Coleman (719-720), in a perfect social system the actors are rational and there is no structure to impede any actor's use of resources at any point in the system (viz. there are no transaction costs). He claims that there will be neither first-order nor higher-order free-rider incentives. (I would have liked to see a more explicit defense of this claim, though perhaps he means results such as Coase's theorem and other theorems about the existence of equilibria in idealized conditions.) Accordingly, e.g., no 'double coincidence of wants' can exist. Social capital, understood generally as knowledge and skills required by social life plus the resources to act socially and especially to act on such knowledge, is assumed to be complete. Norms and rules seem to involve transaction costs – hence it seems they can exist in a perfect social system only when utilitaristically conceived. (Construed in a Kantian sense they might involve non-Archimedean preferences and there could then be no utility function of the Cobb-Douglas kind or of any other kind.)

4. Corporate Interests and Corporate Action

Value is the decisive motivational criterion for Coleman: that outcome is chosen by the system which has the higher value for it, where value is defined as interests weighted by power (934). In the case of an independent good j, in which the actor has interest, the value is thus $r_i x_j$. When the event outcome involves an increment to some resource already existing in the system, Coleman's theory uses the Cobb-Douglas utility function to find the change in the actor i's utility when the quantity of resource j changes. Coleman accordingly finds it is reasonable to postulate that the increment of actor i's resources which he is willing to devote to acquiring an

increment of resource j will be proportional to the increment of satisfaction this increment of resource j will bring (935). This assumption serves to give an equilibrium criterion (formula (34.6)) in which corporate interests, values, and control appear: The corporate actor is indifferent between acquiring an increment of good j and an increment of good k if and only if $x_{jG} / c^e_{Gj} v_j = x_{kG} / c^e_{Gk} v_k$, where the index '$e$' denotes the equilibrium values of c in these two cases.

Given this, it can be proposed, although Coleman does not put the issue in this way, that it is rational for the (corporate) actor to form the intention to act (and to act) in a way that it leads to the maximization of its expected utility, and thus to its acquiring (an increment of) good j if its value at equilibrium exceeds the equilibrium value of all the other goods considered.[1]

Let me note that Coleman does not speak of intentions in this connection. I argue, however, that they are needed in the collective case as much as they are needed in the case of individual actors, for we can conceive of collective actors in analogy in this motivational respect with individual actors both when the latter act separately and when they act jointly. We can not only think in analogy but can indeed analyze actions by collectives in terms of actions of non-collective agents (see Tuomela 1989a; 1989b; 1993; and below). This is basically what Coleman does as well. On the other hand, we cannot account for the intentional actions (be they separate actions or joint actions) of non-collective actors without reference to these actors' intentions and their acting on those intentions. For example, agents are not normally Buridan's asses: faced with equally strong opposing wants (or 'interests', to use Coleman's term) they form the intention to act on one of them.[2]

We can in fact present the above rationality condition more directly in terms of interests, relativizing the criterion to the case where the equilibrium conditions hold (and thus to a fixed optimal amount of control over the good j):

(GI) Group G intends to do A_{j*} only if $j*$ maximizes the value of j in $\sum_i x_{ji} r_i (1,\ldots,n)$ given that equilibrium conditions hold (viz. the members of G are maximizing their Cobb-Douglas utilities).

Note that interests are quantitative wants, and they are weighted with the power (resources) of the agent. This surely resembles philosophers' locution about strongest wants and about the cognitive and doxastic presuppositions of intentions

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[1] We may put this in more technical terms as follows: Group G rationally intends to do A_{j*} only if the value $j*$ of the parameter j maximizes the expression $x_{jG} / c^e_{Gj} v_j$. This principle obviously is not anything like a conceptual truth. It can be regarded as a kind of rationality principle for intention formation, because surely it is rational to maximize one's expected utility. On the other hand, it is a contingent fact whether a group is rational in this sense. Our principle of rational intention formation involves the following in the context equilibrium states in Coleman's system: a) *ceteris paribus*, the more weighted interest there is connected to j ($\sum x_{ji} r_i$ over the m actors), the more good j counts motivationally; b) *ceteris paribus*, the less G has of j weighted with its value,the more j counts motivationally; c) the less valuable (the smaller the price of) j is, *ceteris paribus*, the more it is wanted.

[2] There is much recent philosophical literature to this effect – see, for example, Tuomela 1984; Bratman 1987; Mele 1992.

(e.g., the presupposition that the agent believes he can do what he intends to do), at least in the case of correct beliefs.

Coleman comments on the situation at hand as follows (937):

> "The result, then, is straightforward. If there is a perfect social system at the lower level (within the corporate actor), the interest of the higher-level actor (the corporate actor) in a given resource is the power-weighted sum of interests of lower-level actors in that resource. If there are *m* lower-level actors in the system that comprises the corporate actor, the corporate actor's (subjective) interests are given by" (I use my notation):
>
> $x_{jG} = \sum_i x_{ki} r_i (i = 1,...,m)$

But this is just the same as the value of good *j*. Thus the corporate actor's interest in *j* equals the value of *j* for the members of the corporate actor.

> "These interests lead the corporate actor to act, in exactly the way interests of a unitary actor lead him to act. That is, the indifference curves (the equilibrium holdings) for the corporate actor bear the same relation to its interest in resources, as defined (by the above equation) and its control of resources as the indifference curves for a unitary actor do to its interests in and control of resources. This means that if a corporate actor is composed of unitary actors with Cobb-Douglas utility functions and is a perfect social system internally, the corporate actor itself can be regarded as having a Cobb-Douglas utility function." (937)

Coleman thus argues here that - at least in the case of a perfect social system - we should explicitly define group interests and group utilities as the aggregate of group members' interests and utilities. Accordingly, in the case of *(GI)* we arrive at the following expression to be maximized: $\sum_i x_{ji} r_i / c^e_{Gj} v_j$. (Let me note in passing that in the case of private goods it might be possible to analyze the quantity of *j* controlled by *G* analogously. Indivisible group goods cannot, however, be handled so, because they are collectively owned in a non-distributive sense.)

5. Criticisms

Coleman's theory is surely a fine achievement in many respects. It is a both conceptually and technically precise, comprehensive, and generally well-argued attempt to apply the idea of human beings as rational, utility-maximizing actors to all social life, including the actions of collectives. However, it is the task of a critical commentator to note the following limitations of his system and other problems connected to it:

1) Even if Coleman speaks of a corporate actor as a purposive actor and refers to its 'intents', the theory still does not employ the notion of intention. But intentions are clearly needed, as already noted.

2) Means-end beliefs and other beliefs (such as mutual beliefs expressing the 'social reality' of various things, such as what counts as money) are needed – as will be argued below – but they are missing. (They could perhaps be taken into the system in the form of probabilities.) In Section 6 below I shall argue in passing for the necessity of incorporating beliefs into the system.

3) As Coleman himself notes, his linear system of action is a closed system of exchange (943). This is surely a limitation. (My own account, to be presented below avoids this problem.)

4) Social action, and especially group action, needs to be related to the right social and normative context (e.g., the governing board of a corporation must act in the right circumstances for its decisions to bind the corporation; also see below). Coleman does not impose this kind of requirement.

5) Coleman's theory seems unable to distinguish between intentional and unintentional group action.

6) Coleman gives explicit definitions of group notions in terms of micro- and system-level notions. This is too blunt unless these definitions are related to context; and even with such relativization, such explicit definitions may be too rigid to analyze group notions. (See below and Tuomela 1993, for discussion.)

7) Coleman's account does not after all take the jointness-level (my term) or system-level (Coleman's term) seriously enough. Although he discusses jointness effects in the case of joint action (see, e.g., Chapter 27), in his linear system of action only aggregation is used and genuine jointness-effects are ignored.

8) Coleman claims (or at least seems to claim, e.g., on p. 938) that corporate actions must concern indivisible events and public (or, better, corporate) goods. This seems wrong. A group can bake a cake, and this result is a divisible good. However, at least as long as representation is involved, all the group members have a warranted claim for a piece of the cake. This is a kind of collective feature which makes this case resemble the case of public goods.

9) Because it is highly idealized, Coleman's notion of a perfect social system, among other things, does not lend itself to a serious discussion of social norms (e.g. the Kantian and other non-consequentialist aspects of norms), as noted. To be sure, here he is in the same boat as economists when they rely on perfect markets, but that does not answer the criticism.

6. A Philosophical Analysis of Group Intention and Group Action

I have developed a philosophical account of group action elsewhere (Tuomela 1984; 1989a; 1989b; and most notably 1993). 'Philosophical' here means that I concentrate on the general features of these notions that have to be non-contingently present when they are being employed. Thus my account, summarized below, is not meant to be an empirical social theory – except perhaps in a highly general and partial sense – whereas Coleman's theory can be regarded basically as an empirical one.

We commonly attribute actions to social collectives and especially to proper social groups. Thus, we use locutions like "firm F produced the goods G", "nation N_1 attacked nation N_2", "the board dismissed Jones", "the team scored", and so on. On the basis of examples like these one can begin to investigate the conceptual nature of actions performed by social groups and of the conditions under which attributions of actions to social groups can correctly be made. Social groups will be understood to be collectives capable of action and possessing what I call

'authority systems' (Tuomela 1993). Authority systems are a kind of group decision-making system.

One of the central theses that I have defended is that the actions of groups are 'made up' of, or 'constituted' by, joint actions of persons. Here is a simplified formulation of this thesis: If a group (with the agents $A_1,...,A_n$ as its members) does something X, then at least some of its members, say $A_1,...,A_m$ $(m \leq n)$, must, in the right social and normative circumstances, do something $X_1,...,X_m$, their parts of a joint action (of X or of a joint action generating X); and in normal circumstances these parts serve to generate or 'make up' X. Here, $X_1,...,X_m$ will be parts of a joint action of $A_1,...,A_m$, who are called the 'operative' agents (for action) of the group. This joint action need not be of the type X, but it should be taken as one generating or bringing about a token of X. In the case of intentional group action intentional joint action is required, and therefore shared 'we-intentions' (or group-intentions) by the agents will be involved. Consider some examples. If one nation declares war against another nation, this may take place through appropriate actions by the members of its government, or its parliament, or by its president. Or consider a hockey team's scoring. Some player, or perhaps players, did the scoring. Let us say that it was the 'operative' members of the team who did it. The team's scoring was constituted by their actions.

As seen, a collective, say G, performs an action X intentionally in certain 'right' social and normative circumstances if and only if there are some operative agents for the collective who jointly (unless a single agent only is involved) intentionally do something which in those socially and normatively right conditions brings about X (or, more precisely, the so-called 'result' event or state which is logically presupposed by X). My analysis relies on the notions of an operative (versus non-operative) member and of the socially and normatively right circumstances.

Consider the following argument for the presence of correct social and normative circumstances in the case of group actions (and, for that matter, group goals and group beliefs). It relies on the fact that the notion of the socially and normatively right circumstances and the notion of an operative member are crucial in accounting for the functioning of formal and organized collectives such as corporations. In their case the statutes, by-laws and other relevant rules of the collective can be shown to connect goals (interests, purposes, and whatever subtypes of goals are at stake), beliefs (or views), and actions. To have successful group action we must also require that the right circumstances (as specified or presupposed in the rules) obtain; and group beliefs about those circumstances typically mediate between goals and actions, in analogy with the single-agent case (cf. criticism 2) of Section 5). Indeed, in the case of typical formal collectives, certain position-holders are required by the constitutive rules of the collective to set goals and accept views for the collective. So the main argument here is that because formal collectives like corporations require the previously mentioned technical notions for an adequate account not only of their actions but also of their goals and beliefs, we need these technical notions, suitably liberalized, also in other cases such as simple task groups.

Because of limitations of space and because I have elsewhere (Tuomela 1989a; 1989b; and 1993) discussed the notion of an operative member and the notion of the correct social and normative circumstances, the following synoptic characterizations must suffice here. The operative members in the cases of group actions, group goals, and group beliefs are those actors, goal-formers, and belief-formers by virtue of whom, respectively, actions, goals and beliefs are attributed to groups. The right social and normative circumstances are those in which the members of collectives act and form views in their positions (and in their right tasks within them). Positions can be regarded basically as collections of tasks (based on so-called 'r-norms' or social rules) and social roles (based on so-called s-norms or 'proper' social norms, e.g., conventions). Social rules are created by an authority or a body of authoritative agents. Basically they can be regarded as products of agreement-making: When created for a group by the group itself, r-norms can be taken to be based on (explicit or implicit) agreement. In contrast to this, s-norms are based on mutual belief.

The rules defining positional tasks can be either formal (resembling laws and statutes) or informal (based on informal group agreement). The present approach can handle group actions and group attitudes also in cases of groups without rules, as long as there is an 'authority system' (viz., an explicit or implicit authority-incorporating 'mechanism' or system) for creating joint decisions and commitments in the group. (See Tuomela 1993, for a systematic discussion of the above issues, reflecting in part ideas of Hobbes and Rousseau.)

The basic philosophical point here is the following. Rules for a group can be created only by the help of some 'authority system' – a system for creating shared we-intentions, indeed, group wills. Often group discussion and negotiation is involved here. The system may involve a set of group members, viz., the operative members, representing the others. Underlying the existence of such authority, and the involved possibility of representation, is the capability of group members – to speak in Rousseau's terms – to give up their will (with respect to some issues) and thus their 'original' authority and to transfer it to the group via a group-authority system, which 'pools the wills' into a group will (cf. also Gilbert 1989, 189, for a related account). The authority system need not be explicit but can also operate implicitly or covertly. Without a 'group decision-making mechanism' of this kind the making of rules is not possible. Indeed, the exercise of authority in this sense can be regarded as both necessary and sufficient for group decisions, group agreements, etc. to give rules (e.g., of the form 'Everyone ought to do his part of X').

It should be emphasized that Coleman also speaks of the transferral of rights and of collective control and makes these ideas central to his system. Without comparing my approach with his concerning this matter, it should be noted that an authority system gives group intentions without postulation of a perfect social system. My system is not closed but allows for feedback from its environment (cf. criticism 3) of Section 5).

Although space does not allow me to argue for my approach to the topics of group intention and group action, I will present summaries of some of my central

analyses and refer the reader to my 1993 book for discussion. A good place to start is my analysis of intentional group action, meaning by group action an action performed by a group (e.g., a corporate actor in Coleman's sense) 'as a whole' in a normatively binding sense. Roughly speaking, according to this analysis a group intentionally performs an action X if the relevant operative members, acting in the right way in their positions and carrying out the group intention that the authority system of the group has produced (or at least carrying out something required by that group intention in the situation at hand), jointly perform an action Y which brings about X. The group intention binds (commits) not only the operative members but also the nonoperative members, although the latter will be committed only in the much weaker sense called 'tacit acceptance' in our analysis below.

This is my basic analysis for intentional group action:

(GAI) A *group*, G, *performed an action* X *intentionally* in the (right) social and normative circumstances C if and only if in C, there were operative agents $A_1,...,A_m$ of G such that

1) $A_1,...,A_m$, when performing their social tasks in their respective positions $P_1,...,P_m$ and due to their exercising the relevant authority system of G, intentionally jointly brought about X (viz. there was an action Y such that the operative agents intentionally jointly performed Y and this performance of Y generated, and was believed by the operative members to generate, the result-event of X).

2) because of 1), the (full-fledged and adequately informed) nonoperative members of G, as members of G, tacitly accept the operative agents' intentional bringing about of X – or at least ought so to accept it;

3) there was a mutual belief in G to the effect that there was at least a chance that 1) and to the effect that 2).

I will not here clarify this analysis further. Non-intentional group actions can also be characterized within my approach, but I shall not discuss them here. What needs to be discussed is intentional joint action in this context. The central point is that the operative members must act on a joint we-intention, which is what a group intention in this context amounts to.

In joint-intention formation, each agent accepts "We will do X" and, because of this, "I ought to participate in our doing X together". This acceptance means not only that the agent (at least dimly) recognizes the existence of the agreement to perform X and accordingly commits himself to performing X together with the others. An agreement so accepted in the process of joint-intention formation also leads, on conceptual grounds, to each agent's 'public', communicated acceptance of the standard expression "We will do X" for 'group-intentions', viz., we-intentions and standing group-intentions, entailing "I will participate in, or contribute to, our doing X". This gives the participants an overriding and exclusionary reason to perform X jointly.

The only kind of joint intention we need to consider here is joint we-intention. We-intentions are action-generating joint intentions that agents have in situations of intentional joint action (cf. carrying a table jointly). A we-intention involves the intention to perform one's part of the joint action. We can say roughly that a

member A_i of a collective G ('we' for A_i) we-intends to do X if and only if A_i (i) intends to do his part of X (as his part of X), (ii) has a belief to the effect that the joint action opportunities for an intentional performance of X will obtain; and, furthermore, (iii) believes that there is (or will be) a mutual belief among the participating members of G – or at least among those participants who do their parts of X intentionally as their parts of X – to the effect that the joint action opportunities for an intentional performance of X will obtain.

Given the notion of a we-intention, we can characterize an intention ascribed to a group basically in terms of shared we-intentions (in the group action context) and the idea that such group intentions, the results of 'exercises' of authority systems, bind the group members.[3]

Here is a point of connection between my account and Coleman's account of group action in terms of value (power-weighted interests). It is a rationality condition of joint intention formation that if some agents jointly intend to perform something X, then they have no momentarily stronger incompatible wants (or, in the case of risky situations, stronger want-belief combinations) concerning X. As this connection was in effect commented on in Section 4, I need not here say much more about it. Note that although the above condition is a rationality condition, it does not make anything like the strong assumption of the presence of a perfect social system. Nevertheless, we have the feature that the intending agents should maximize their (expected) utility, viz., form an intention to act on the strongest want (or strongest want-belief combination, or 'lottery' as decision theorists say). This is the same idea that Coleman works with: maximize utility, and hence maximize value (power-weighted interest) in an equilibrium-context. Let me, however, emphasize that Coleman's system does not attribute beliefs to the actors (collective or non-collective actors). Yet wants and intentions are notions in the goal-category and – so to speak – they cannot be made operative without an information element (belief or knowledge).

7. Conclusion

This paper comments on Coleman's (1990) account of group action (or corporate action, in his terminology), and his view is compared with the largely comple-

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[3] This is my analysis of a group G's intention (Tuomela 1993, Chapter 6):
A group G *intends* to perform or bring about X in the social and normative circumstances C if and only if in C there are operative agents $A_1,...,A_m$ such that
1) the operative agents $A_1,...,A_m$, when performing their social tasks in their positions $P_1,...,P_m$ and due to their exercising the relevant authority system of G, have come intentionally jointly to accept the group-intention expression 'We will do X' and thus to group-intend to perform X, and, furthermore, because of this exercise of the authority system they also ought to continue to accept this group-intention;
2) because of 1), the (full-fledged and adequately informed) nonoperative members of G tend to tacitly accept the group-intention to perform X or at least they ought to accept it;
3) there is a mutual belief in G to the effect that 1) and 2).
For the notion of group-intention also cf. Tuomela 1991. Arguably, group-intentions are we-intentions or dispositions to we-intend.

mentary view of Tuomela (1984; 1989a; 1989b; 1992; and especially 1993). In fact, criticism is limited mainly to Coleman's linear system of action, a mathematized version of his general account of action. It is possible that some of the critical points made do not affect his more verbally expressed theory – due to the limitations made in setting up the mathematical framework – but that remains for Coleman to argue for.

Coleman's theory is in my view a highly significant achievement, and it deserves to be studied and developed further. None of the criticisms made in this paper are fatal to his theory and many of them apply equally well to many other similar mathematical theories (e.g., certain theories and models in economics).

Bibliography

Bratman, Michael E. (1987), *Intention, Plans, and Practical Reasoning*, Cambridge/MA

Coleman, James S. (1990), *Foundations of Social Theory*, Cambridge/MA-London

Gilbert, Margaret (1989), *On Social Facts*, London

Mele, Alfred (1992), *Springs of Action: Understanding Intentional Behavior*, Oxford-New York

Tuomela, Raimo (1977), *Human Action and Its Explanation*, Dordrecht-Boston

- (1984), *A Theory of Social Action*, Dordrecht-Boston
- (1989a), Collective Action, Supervenience, and Constitution, in: *Synthese 80*, 243- 266
- (1989b), Actions by Collectives, in: *Philosophical Perspectives 3: Philosophy of Mind and Action Theory*, 471-496
- (1991), We Will Do It. An Analysis of Group-Intentions, in: *Philosophy and Phenomenological Research LI*, 249-277
- (1992), On the Structural Aspects of Collective Action and Free-Riding, in: *Theory and Decision 32*, 165-202
- (1993), *The Importance of Us: A Philosophical Study of Basic Social Notions*, Stanford (forthcoming)