Scandinavian Political Studies, Vol. 6 — New Series — No. 2 1983
ISSN 0080-6757

The Verification of Motives

Axel Hadenius, University of Uppsala

This article deals with various approaches to the verification of intentional explanations. First a survey is given of the different empirical indicators which may in principle be used. Then follows an account of a number of rules for testing of the validity of different kinds of verification; these rules are derived in the main from the field of content analysis coupled with the so-called historical method.

Introduction

The explanation of actions with reference to motives would seem to be the most common mode of exposition within socio-scientific and humanistic research.[1] The essence of the explication within this approach to analysis is an empirical relationship in the form of an asymmetric connection between actors' motives (intentions) and their actions. Given that the act (A_1) is known, the objective of the research consists in the discovery of the motive(s) which compose the explanatory factor. It proceeds through adduction of various kinds of empirical data, which we here call motive indicators. By means of the information conveyed by these indicators we as researchers draw an inference (deduction) from diverse data to the motive. The method of explanation can be simply illustrated by the following figure:

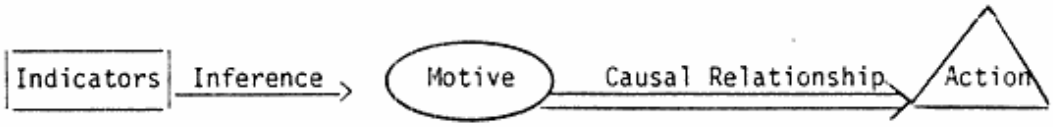


Fig. 1.

In this paper I am primarily concerned with the first relationship in the figure, i.e. the inference problem, which deals in general with how we obtain information about motives from empirical material.[2]

The adduction of empirical data fulfils the requirement that the assertions about reality be based on verification. But not all kinds of reference to source material suffice as verification. The elementary requirements of science stipulate that the compilation and interpretation of data meet certain standards of clarity, systematism and control.

Scandinavian Political Studies, Vol. 6 — New Series — No. 2 1983
ISSN 0080-6757

The Verification of Motives

Axel Hadenius, University of Uppsala

This article deals with various approaches to the verification of intentional explanations. First a survey is given of the different empirical indicators which may in principle be used. Then follows an account of a number of rules for testing of the validity of different kinds of verification; these rules are derived in the main from the field of content analysis coupled with the so-called historical method.

Introduction

The explanation of actions with reference to motives would seem to be the most common mode of exposition within socio-scientific and humanistic research.[1] The essence of the explication within this approach to analysis is an empirical relationship in the form of an asymmetric connection between actors' motives (intentions) and their actions. Given that the act (A_1) is known, the objective of the research consists in the discovery of the motive(s) which compose the explanatory factor. It proceeds through adduction of various kinds of empirical data, which we here call motive indicators. By means of the information conveyed by these indicators we as researchers draw an inference (deduction) from diverse data to the motive. The method of explanation can be simply illustrated by the following figure:

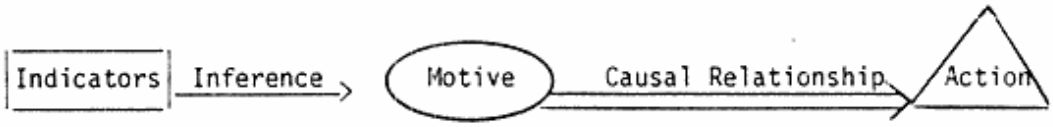


Fig. 1.

In this paper I am primarily concerned with the first relationship in the figure, i.e. the inference problem, which deals in general with how we obtain information about motives from empirical material.[2]

The adduction of empirical data fulfils the requirement that the assertions about reality be based on verification. But not all kinds of reference to source material suffice as verification. The elementary requirements of science stipulate that the compilation and interpretation of data meet certain standards of clarity, systematism and control.

With these requirements in mind we must observe that the explanations of motives which we are wont to offer otherwise leave much to be desired. The drawing of inferences is frequently a summary process, using simple means and generally devoid of proper arguments.

The battery of rules at our disposal too is comparatively limited. Only too often must inferences be drawn in default of methodical criteria; the researcher must take his stand on experience and common sense.

> 'Though widely used in a number of behavioral sciences, inferential procedures remain largely in the nature of an intuitive art, rather than a systematic science'.

says Doris A. Graber (Graber 1976, 71).

Nevertheless some useful rules do exist, chiefly in the field of content analysis, and within the so-called historical method. The methodical criteria applied in these usually separate research traditions could, I think, be co-ordinated and further developed. I shall here attempt to show that at least some steps can be taken in this direction.

First a survey is made of the various motive indicators, which in principle lend themselves to the explanation of intentions. Then follows a presentation of a number of test regulations which can be applied to the various kinds of inference. Finally the approach to the establishment of a ranking order (priorities) of motives is discussed.

Inference from Declarations of Motives

A natural way to discern intentions is to study statements by the actor[3] who performed the action (A_1) which is to be explained. It thereby seems most convenient to use such statements as explicitly justify the act in question. The actor there gives some form of reason, argument, for his conduct. Such comments can precede, coincide with, or follow the action in question. And they can be highly variable in character. If we seek, for example, the motive for a government's actions on an issue, we can derive information from official documents (government declarations, bills etc.), via press, radio and TV material (reports, interviews etc.), via party material (for both internal and external use), by arranging our own interviews with the protagonists, via access to material used in the decision-making process within the government or within the party or parties concerned, as a result of opportunities to study the letters, diaries, memoranda etc. of the persons involved. Indeed the list of material describing motives could be made more detailed and much longer. It is another matter that in concrete research situations we must frequently have recourse to a limited range of alternatives.

The derivation of motives from motivations would seem to be the most prevalent mode of inference. As an absolute example I can mention Evert

Vedung's *Unionsdebatten* (The Union Conflict), where the author after mere scrutiny or arguments seeks to explain the conduct of the Swedish and Norwegian protagonists in connection with the dissolution of the union of the two countries in 1905. Using this type of motive source Vedung can 'inter alia' demonstrate a connection between these actors' stance in the union dispute and their positions regarding home affairs (Vedung 1971).

As an example of an argumentation analysis supported by a material of a more limited nature, I can cite Allen S. Whiting's *China Crosses The Yalu.* The question the author seeks to answer is why China entered the Korean War. The investigation is based in essence on statements in the Communist Chinese press. On the basis of these motive statements Whiting draws the conclusion, inter alia, that China did not enter the war primarily for expansionist reasons (Whiting 1960).

Motivations may be described as direct motive sources insofar as they make an explicit statement about the action which is to be explained. But motives can also be inferred from other, more indirect statements. I refer to motivations expressed in more general terms, as often happens in political life. Notwithstanding that these do not single out the action we are to explain, and albeit that they are frequently formulated in general and sweeping terms, they may provide valuable information as to motives.

Inferences from such general motive statements were used, for example, in studies of countries' foreign and security policy. The premise consists in certain central declarations which defines the countries' attitudes in principle, such as the Truman Doctrine and the Brezhnev Doctrine. Thus in analysis of the intentions underlying Soviet actions in Eastern Europe, it is possible to refer to the Brezhnev Doctrine (Brodin 1977, 22-4).

General statements which can be used as motive sources are surely to be found in all political spheres, and (like the motivations) can come to our notice through a diversity of material. Their content range too may vary. In a rough division we can distinguish such general motive statements as are associated with certain specific sectors (e.g. tax policy, or housing policy), and such as span several sectors (e.g. statements on the policy of distribution). Furthermore the statements can differ with respect to their proximity to actions. Some may, albeit in general terms, indicate a certain type of action (such as the said doctrines relating to foreign policy), while others do not per se define a specific behavioural orientation; they perhaps express only a general evaluation or opinion of reality. These latter statements too can occasionally be used for inference of motives, insofar as they are assumed to serve as background to certain types of intention and actions consequent thereon.

What evidence is there of a connection between motive statement and action? When we take our stand on motivations the link is obvious; indeed the connection is here articulated in the very statement. What we call general

declarations of motive, however, are actually characterized by the lack of this explicit linkage of word and action. The connection therefore cannot be confirmed by means of a so-called narrative source. We must instead endeavour to apply another form of verification, namely circumstantial arguments (Torstendahl 1966, 104-13). This means that we must try by means of probability reasoning to demonstrate that the act springs from a certain general declaration of motive (or several such). The proof of a connection is that the act appears typical in the light of this motive statement.

Among the motive statements we could thereby distinguish two kinds of indicator which can be used for the drawing of inferences. They are illustrated in the following figure.

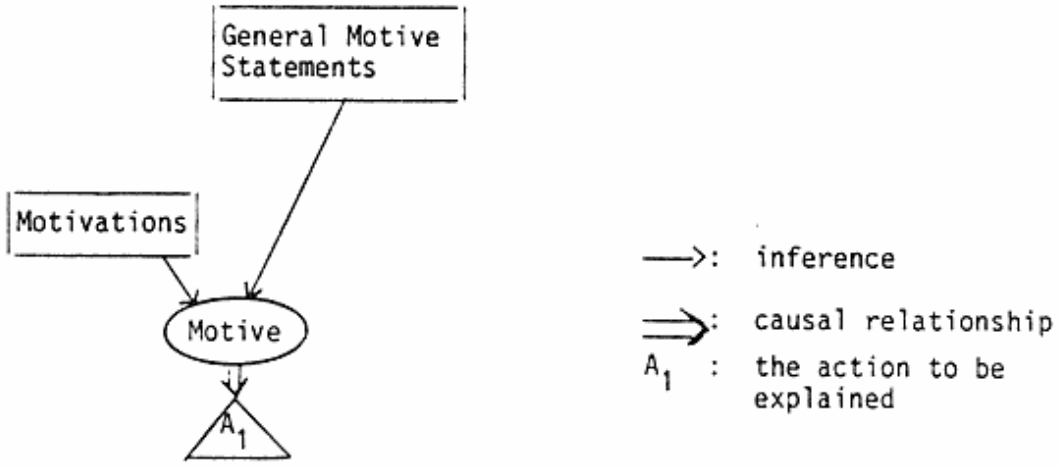


Fig. 2.

It would seem beyond dispute that motive statements (at least in principle) can serve as verification in explanations of intent — the controversial point consists rather in the methodical rules to be followed when inferences are actually drawn. These problems will be discussed later. First of all let us see whether there are also other kinds of motive indicator which can be used as scientifically tenable verification. The issue we shall test is whether it is also feasible to deduce information as to motives from the actions which are performed.

Inference from Actions

I believe that many beside myself intuitively understand that certain actions are such as to declare in part why they are performed. If, for example, we see a cyclist extend his right hand at an intersection we conclude that he makes the gesture in order to inform other road users of his intention to turn right. Our daily life is full of incidents where we similarly reach conclusions concerning the intention underlying actions. This also applies to political phe-

nomena. When state A recalls its ambassador to state B for consultations, this is usually taken as an indication that tension has arisen between these states, and that state A wishes by its action so to demonstrate. And to take an example from domestic policy, I recall an incident in connection with the American presidential election in 1972. Early in his campaign President Nixon opposed the so-called bussing which sought to achieve a racial balance in the schools. Several commentators therefore deduced that Nixon intended to rely primarily on the support of white votes in the election — notwithstanding that there was no motive statement whatever with this explicit content. The President's action in such a situation alone prompted this interpretation (Graber 1976, 77).

Many more examples of this mode of inference from actions could be adduced (see Dahl 1956, 120-30). But the interesting question is, of course, whether these common sense deductions bear any relationship to science. Do they suffice as verification?

The researchers who treated the subject are wont (with some hesitation) to answer 'Yes' to this question. Usually, however, they simultaneously issue a general warning against circularity in the explanation; when one seeks to verify motives by referring to the action to be explained, dependent and independent variables tend to fuse, as the saying goes. The explanation is then prone to resemble a circular reasoning of the type X did A_1 because X wanted to do A_1 (Dahl 1956, 118; Luce & Raiffa 1957, 16; von Wright 1971, 112; Heradstveit & Narvesen 1978, 88). Such an assertion contains no empirical information. It constitutes merely a tautological description of the rationalistic tenet that actors act in accordance with their wishes (Hadenius 1981, 16).

The circularity question obviously touches on something fundamental. If we inevitably encounter the dilemma described above, the idea of inference from actions to motives must reasonably be abandoned (Sjöblom 1980a, 164). Let us therefore inquire whether any solution can be found.

The Norwegian historian Ottar Dahl has contributed an interesting argument in this regard. He maintains that the circularity per se is invariably inherent in explanations of this type, but considers that this nevertheless does not by definition render the practice trivial. So long as the explanation is offered in qualified terms, i.e. so as to represent a choice between several possible options, it may still be of interest. He here stipulates two requirements which should be met:

1. *'The localization of the subject:* Who has this motive?'
2. *'The determination or classification of the actual motive:* To what was P's action directed?' (Dahl 1956, 129-30).

In those cases where these empirically discriminatory criteria are not fulfilled, the explanatory reasoning becomes tautological in content. For example,

Dahl mentions an assertion where the explanation of an historical event — an institutional change — consists of the assumption that the institution no longer 'filled a need in the country itself'. Such an explanation is, says Dahl, devoid of interest, since it neither states who would have felt this need, nor specifies what kind of need is involved. In contrast — and as an example of an explanation which fulfils his two criteria — he quotes the following historical assertion:

> 'It is certainly a practical need on the part of the Oppland farmers which sustains the Court at Eidsvoll; the venue suits them' (Dahl 1956, 130).

Dahl is trying to show that inferences concerning motives from actions need not result in pure tautologies. The qualifications he stipulates — and evidently adjudges feasible — are in the nature of empirical determinations which do not follow from a logical circularity.

The question then becomes on what these determinations are based. Dahl offers no guidance on this point. He seems to assume that inferences from actions can only be regarded as guesses. The point he would make is that this activity nevertheless need not be irrelevant. If the reasoning is specified so that we select definite interpretations and thereby exclude others, our guesses may be given the form of hypotheses subject to empirical tests. But Dahl seems reluctant to proceed further than to such an exploratory intention; the idea that it could in any sense be possible to verify (document) motives on the basis of actions evidently does not occur to him.

Must we too be satisfied with this premise? No, let us attempt to go further. Dahl demonstrates (at least implicitly) that circularity may involve two problems. The one pertains to the risk of tautologies, i.e. the inference only constitutes a so-called logical truth, which tells us nothing about the reality. But Dahl has proved that this need not be the case. The second problem concerns the difficulty of verifying our explanatory reasoning. In this sense Dahl adjudges circularity inevitable.

He seems to aver (like others who touched on the problem) that inference from actions does not allow of acceptable verification since the factor which explains the action (A_1) is derived from the same action. The dependent and independent variables are thereby identical.

Here, however, I believe a mistake is made. It is not a matter of two observations from one and the same variable. The inferences we draw from actions do not indeed originate from the action (A_1) to be explained. Such a derivation would hardly be possible, and in any case meaningless.

As Lennart Nordenfelt pointed out, the information we have around an action can enlighten us as to motive:

'One single action without context, however, shows very little. Such an action can issue from several alternative kinds of intentions and it may not have issued from any intention at all. To determine the existence of an intention we need additional information' (Nordenfelt 1974, 119).

Consequently an intentional interpretation of the action A_1 can only be effected by its setting into a wider context. It is from *this context* that the motive inference is drawn. In other words, dependent and independent variables are not derived from the same fact! The motive which constitutes the explanation is based on facts extraneous to A_1. Thus the form of the verification is not circular.

What then does the crucial, and at the same time diffuse term 'context' here signify? What kind of other facts can be used in this mode of inference? My reply is to suggest that the motive for A_1 is derived from other actions with which A_1 can be connected, the motive for which we know. Thus it is not the other actions per se but the motives underlining them which ultimately represent the source for our inferences.

First of all, it may be a matter of other actions (A_2), which A_2 the actor himself performed — actions which accordingly are demonstrably linked to A_1. If we then know the motive for A_2 we can conclude that this is also valid for A_1. Conclusions of this type are in practice comparatively common in research contexts. For instance, I may cite a reasoning proposed by Graham T. Allison with regard to the motives underlying the Soviet decision to deploy nuclear missiles on Cuba (before the Cuba Crisis in 1962).

One of the alternative explanations scrutinized by Allison was particularly widespread. It postulated that the Kremlin took a bold chance for the purpose of testing American resolution on the issue of maintaining the balance of power between the blocs. But Allison disallows this explanation. He presents inter alia the following arguments:

'The initial Soviet decision to send nuclear missiles to Cuba must have been made soon after the United States had refused to flinch at Khrushchev's ultimatum, forcing him to back down. Certainly the evidence suggests that, during the Berlin campaign, "the Soviet leaders became sufficiently convinced of the quality of the West's will to resist". But why, then, another test?' (Allison 1971, 52).

The point of the argument is thereby that Soviet tactics on Cuba may be linked to their conduct in the Berlin conflict immediately beforehand. Having encountered strong resistance — and therefore yielded — in the case of Berlin they had no reason to test the same issue in Cuba, considers Allison.

The connection between these actions is twofold. They are closely associated in time, and they can be set in the same pattern of conflict: the balance of power. Such a type of likeness between the actions should exist if the inference is to be convincing.

In purely technical terms this too is a circumstantial argument. Once we have demonstrated a probable connection between the actions — which calls for special arguments — we draw the inference as it were by analogy. We reason[4] that if the actor considered a certain course in situation A he should adopt the same approach in the similar situation B. Such a conclusion presumes that the actor is consistent, that in different but similar situations he will arrive at the same decision.

Just as the action (A_1) can thereby be related to other actions performed by the same actor, it may also in certain cases be associated with other actors' actions (A_3). I refer first and foremost to such situations where the actor under scrutiny obviously belongs to a specific collective of actors. We imagine that we are studying the actions of a local party organization in a case where no more direct information in the form of motive statements is available. Then perhaps we find that the same action was performed by other local organizations — and there with clearly expressed purpose. It is only natural intentionally to link these events.

The reasoning is of course also applicable in more exalted organizations. It may relate to states which enter into a defence community (NATO, the Warsaw Pact or the like). If we shall, for example, explain Great Britain's conduct in an international crisis it may well be fruitful to relate the measures to actions performed by other states allied to Great Britain in a similar situation.

Here too the verification proceeds by analogy. But the analogy is here more fragile. For we simultaneously postulate two kinds of connection (or likeness), viz. between actions (A_1 and A_3) and between actors. If the drawing of inferences is to be plausible, the researcher in the concrete case must be able to prove that both these assumptions of resemblance are justified.

Thus we can expand our model with two further steps of inference, viz. such as can be deduced from other actions which the actor himself performed, and such as are based on actions executed by other actors with whom 'our' actor is closely linked (Fig. 3).

How then are we to evaluate such actions as we cannot similarly relate to other specific actions (of the actor himself or of other actors, linked to him)? Nevertheless there are situations where we seem primarily to have only the act itself (A_1) on which to base our judgements.

Let us imagine that we see a man standing alone on a bridge over a watercourse. The man has a large concrete block tied to his back. He jumps into the water and vanishes into the depths. From these impressions (the voluntary leap and the concrete block) we conclude that the man wished to commit suicide. Accordingly through the completed action we could discern a specific motive.

Is not this an example of an inference from the action (A_1) to be explained?

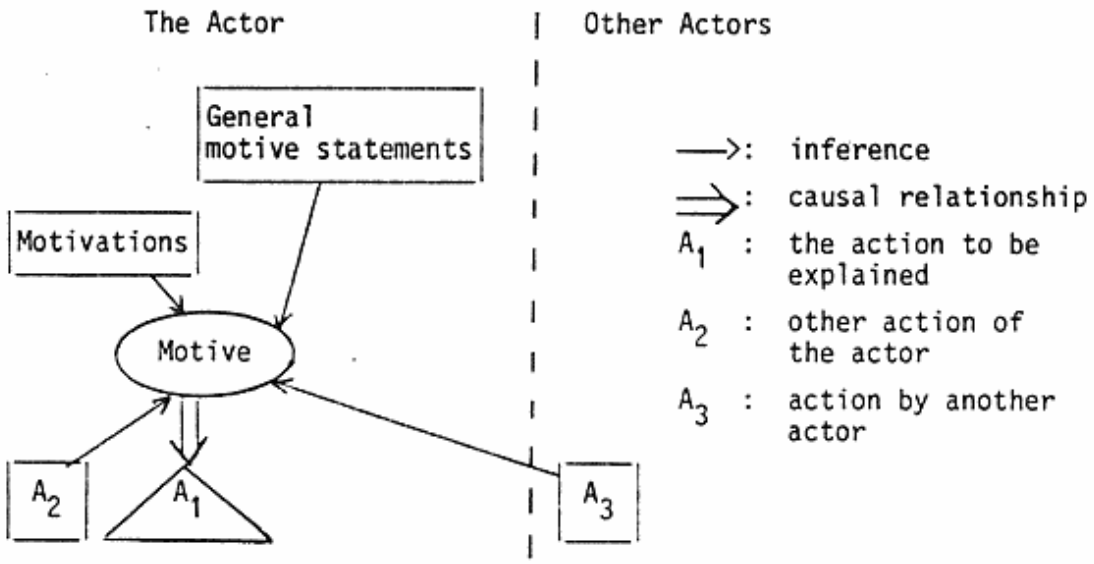


Fig. 3.

No indeed it is not. For even here we deduce our interpretation of intent from a context. We know by experience that certain acts (A_x) usually have a certain objective. Cyclists who extend an arm at intersections normally intend to turn in the direction indicated. And individuals who jump off bridges usually wish to commit suicide.

The reasoning by analogy which we apply in these cases is, however, more fragile than those we previously described. Here too we presume that both actors and actions (A_1 and A_x) are similar. Nevertheless we cannot refer to a specific, external actor. We rather assume that all actors are alike in certain situations. Nor is there normally a definite, other action which can be cited. There is instead a large (usually indeterminate) number of events of which we possess experience as a result of different kinds of mediation (von Wright 1971, 112).

This mode of deducing motives is, however, comparatively common, even in political contexts. Let us illustrate by reverting to the examples of inference from actions mentioned above: a state's recall of its ambassador and Nixon's conduct prior to the 1972 presidential election. When we reach conclusions concerning intentions in connection with the ambassador's recall, we do so from our knowledge of the usual forms of diplomatic expression. We know that such an action traditionally has a certain demonstrative significance, and we can also assume that the government which took this step was aware of this. What then reveals the strategic intention which can be deduced from Nixon's action as regards bussing? Here we base our judgement on an elementary understanding of the rules of the game of politics. If one seeks support from a group — in this case the blacks — one

does not openly dissociate oneself from an issue symbolic for the group. We reason that the aim is then support in the opposite camp.

In this way we incorporate in the context of an action the system of rules — be they formal or informal — which encompass it. This rule system is the ground for our assessment of intent (von Wright 1971, 111; Nordenfelt 1974, 118-9; Shapiro 1981, 112). Our knowledge thereof can, as was hitherto postulated, be in the nature of common sense experience. But this can also be elicited by systematic formulation of a theory.

In the scientific literature we frequently find statements about how political actors behave in different contexts. These may concern how parties conduct their election campaigns, how states settle their differences etc. These statements may be founded on explicit assumptions of the motives of the actors in question. Thus, for example, one may assume that parties address themselves chiefly to groups of marginal voters, or that states are primarily eager to create a long-term, stable confidence in their foreign and security policy.

Such motive theorems can be elicited by both inductive and deductive methods. Motive assumptions which are inductively derived resemble empirical generalizations. Thus on the basis of comparative studies it could be established that states' international conduct is closely associated with the aims of domestic policy. They seek in particular after partners who share and can promote their interests pertaining to economic and trade policy (Holsti 1972, 111-3). But the generalization may also be more limited, and confined to actors in a single country, e.g. the interest organizations in Sweden. Of these we know from Nils Elvander's study that they are inter alia more interested in using certain channels of influence than others (Elvander 1969, 252-7). Such results can serve as a fruitful starting point for investigation of the domestic policy pursued by particular states, or of the surveillance of their interests by individual organizations.

In the deductive case the motive theorem is instead derived from a theory formulated in abstract terms. Anthony Downs' *An Economic Theory of Democracy* is accounted a classic in this genre. Downs starts from the economic marginal utility theory. He assumes that politicians (like the Economic Man) are steered by a profit interest. Politicians seek to gain influence and power. The rivalry for the electorate's votes is seen, according to Down's theory, as equivalent to companies' competition for shares of the market (Downs 1957, 14-20).

Downs deals chiefly with the actions of political parties. In his train researchers such as Mancur Olson and William Niskanen developed similar, economically derived theorems in the fields of organization and bureaucracy respectively (Olson 1965; Niskanen 1971). In addition to the economic theory, above all game theory served as a source for motive theorems. As famous examples I can cite Tomas C. Schelling's negotiation theory and William

H. Riker's coalition theory (Schelling 1960; Riker 1962). These different, axiomatically constructed theories are now usually designated Public Choice (Frey 1978; Mueller 1979).

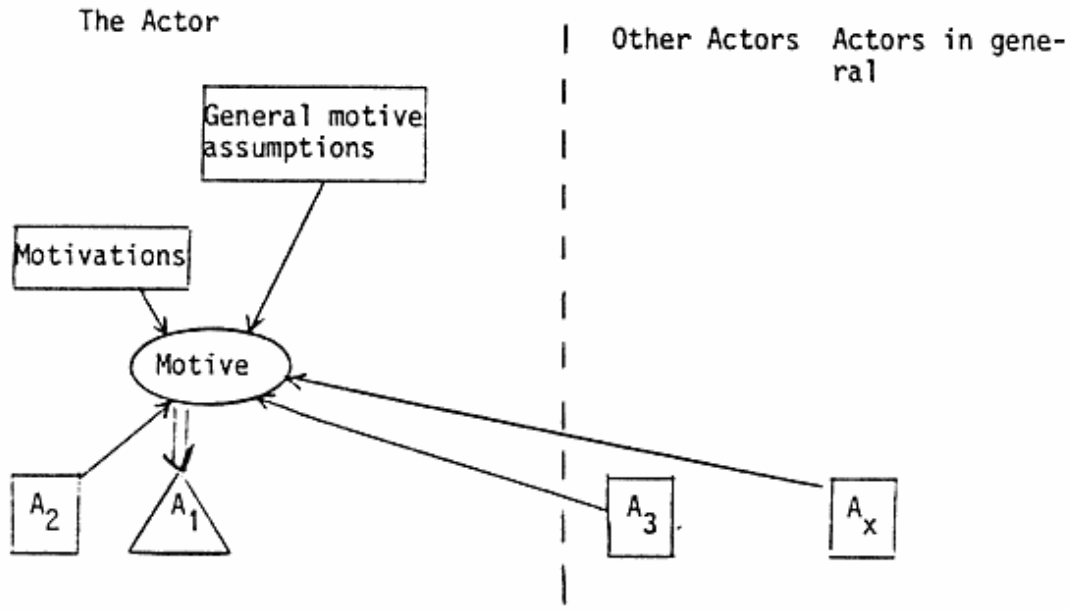
One difference between inductively and deductively based motive assumptions is that the former are more open to testing. In theorems founded on generalizations, the motive component in its entirety has an empirical reference point; it has an equivalent in reality. This makes it possible (at least in principle) to test all its parts via direct observation. In other words, we can go out and examine whether the actors involved really have the alleged motives.

Theorems of deductive origin are less accessible in this respect. The central motive component there has an extremely thin — or indeed no — empirical reference. It is in the nature of a postulate which in principle is only subject to indirect testing, i.e. via the operational hypotheses which can be generated. For his part Downs is well aware that the motive premises he selected have no immediate bearing on reality. The strongly stylized actor who figures in his theory is never encountered in the material world. He is only a theoretical construction for the purpose of devising a simultaneously general and explanatorily strong theory. Whether or not this aim can be achieved is not determined by whether or not the premises of the theory seem realistic — the essential point, says Downs, is how well the hypotheses stand up to the confrontation with the data (Downs 1957, 25-6).

Nevertheless the circumstances that the one thesis is less open to testing than the other does not mean that they are to be differently treated in research practice. It goes without saying that the theorem's propositions as regards motive are to be tested so far as is possible in a current investigation. Merely to refer to assertions by Downs or anyone else concerning the actors' motives will not suffice as verification — unless it can be demonstrated that the theorem was verified in empirical tests where the conditions resembled those applying to A_1.

The possibility of control which is otherwise at hand — as I shall later show — tests the motive assumption against the action (A_1) performed. The explanation then proceeds by the presentation of one, or preferably several motive theorems which are relevant to the actor and the situation under study. The issue may concern, for example, various strategic objectives for parties, about which there are supportive assumptions in the literature (Sjöblom 1970, 73-93; Hadenius 1979, 168-72). The various assumptions are then tested against the action.

Our consecutively constructed figure illustrating potentially applicable motive indicators can thereby be given its final form:



—>: inference

⟹: causal relationship

A_1: the action to be explained

A_2: other action by the actor

A_3: action by other actor

A_x: action by actors in general

Fig. 4.

Testing Criteria

> 'Lack of validity because of false information is, in principle, possible to detect. In practice, however, it is very troublesome, and we generally prefer to discover other facts than the extent to which information lies',

Hans Zetterberg points out (Zetterberg 1965, 123). The problem prompting the complaint — of obtaining valid information about the subject under study — concerns all types of empirical research.[5] Each field has its special difficulties, however.

A general problem in explanations of intent is that they do not permit a primary observation of the explanatory factor per se. A consideration of the kind we call motive is a process occurring in the individual. It is a mental phenomenon. We presume that it exists but it cannot be physically displayed

(Dahl 1967, 90). It has methodical consequences insofar as it limits the type of source material which can be used as verification.

The most immediate types of source are those we call relics. Their distinguishing feature is that they are a part of the phenomenon under study. A document which constitutes the confirmation of an agreement between two parties (e.g. a peace treaty between states) can be accounted a relic. It goes without saying that this type of material has great evidential value (provided it does not prove to be forged).

But the mental phenomena we perceive as motives leave no relics behind. We must be content with verification of a weaker kind: narrative sources — which are usually considered to have the second highest value as evidence — and circumstantial arguments — which are accounted the weakest form of verification.

A motive statement represents a narrative source (can also be called an historic assertion). Nevertheless, as we found, motivations alone are complete in this respect. There both the actor's possession of motive and the relation between motive and action (that the acts ensued from the motive) are explicitly reported. Those we call general motive statements, however, provide no information on the latter case. The connection between possession of motive and the performance of a certain act can only be verified by circumstantial arguments. This type of verification, which technically can take many forms, is also applied in the drawing of inferences from the other motive indicators which were reported above.

In what follows I shall present a number of rules for testing the validity which can be applied to different motive sources. I begin with motive statements.

In this material the motives appear under the guise of verbal expressions (either written or oral). A convenient and frequently practised method stipulates that these expressions correspond in toto to the real motives. We then apply what Ole Holsti called 'the representational model' (Holsti 1976, 44). This means that we simple exclude validity problems by definition. As should be clear, the antithesis (i.e. kind of 'unrepresentational model')[6] is to be developed here. This signifies that an attempt is made from articulated motives (reasons, arguments) to distill the components which may be adjudged to represent the actual intensions (the true beliefs) underlying an action.

Here we encounter a multitude of difficulties (George 1959, 109-11; Graber 1976, 69; Brodin 1977, 19). The motive statements may be many and partly contradictory, and made at different times, and documented in different ways. What principle can serve to sift this abundance of material?

The first applicable criterion evaluates the sources according to their *proximity* to the situation in question. Several aspects (or subcriteria) here enter the picture.

1. Firstly, the sources can be graded according to theit temporal proximity. The rule is that synchronous and (in relation to the action) earlier information are more reliable than later data. The reason is obvious; the longer the lapse of time the greater the risk of loss of memory, rationalization after the event, and the possibility of influence by what others have said and written on the subject (Torstendahl 1966, 92-94, Dahl 1967, p. 74). If, for example, one wishes to interview a politician about his deliberations in connection with a decision, this should occur as soon as possible thereafter; in no case should several years pass. Similarly, a motivation which a secretary of state makes in connection with a bill is (with reference to the criteria here relevant) a more reliable document than a statement on the same subject which the said individual makes in his memoirs, unless it can be shown that these are based on contemporary diary entries or the like.
2. Furthermore, first hand information should, as a rule, be adjudged more trustworthy than second-hand. For it is manifestly safer to obtain the information direct from the person concerned than from an agent. Thus it is better to ask the head of department about his motives than to question the information secretary of the ministry on the issue.

   The problem of dependence between sources, however, is not limited to the question of first- and second-hand data; in principle it persists also in later links in a chain of information. Accordingly it is always important to be able to determine whether different sources are dependent on each other, and if so, what is their order or precedence. The incidence of linguistic, selective and other specific likenesses between sources is usually taken as a sign of dependence (Torstendahl 1966, 98-102; Dahl 1967, 74-5). Such a testing may demonstrate that several data, all of which seem to be primary, are merely links in a chain of tradition; all of them can, directly or indirectly, be traced back to one and the same original source, only this should therefore be used as verification. The general rule is that in the event of internal dependence between sources we must take our stand on the version closest to the original.
3. Finally, when the issue concerns collective actors it is also feasible to speak of proximity in a representative sense (Dahl 1967, 75-6). If we are to base conclusions regarding an organization's (e.g. a party's) reflections on statements by individuals, it is reasonable to stipulate that the persons in question hold a central position in the organization. The words of a party leader carry greater weight than those of one of the ordinary members of parliament.

Another validity problem — which besets all sources irrespective of their degree of proximity — pertains to the well known fact that politicians (like people in general) are prone to present themselves in as favourable light as

possible. They touch up, add and subtract (George 1959, 112-5; Holsti 1976, 43-4; Jervis 1976, 122-3; Bryder 1981, 76). How, then, can we ever know which motive statements are genuine and honest and which are not?

In other words, the question is how to check the *tendency* of sources. Here too, as we shall see, several rules can be laid down.

1. The advice usually given by historians is that the problem can be overcome if we succeed in contrasting sources which may be expected beforehand to be contradictory. If the representatives of parties A and Y — which have strongly conflicting interests — give similar accounts of a controversial event in which both were involved, this can — they maintain — be taken as an indication that the information is accurate (Torstendahl 1966, 94-8; Dahl 1967, 111).

   This seems in principle to be a sensible rule. The difficulty is that it is best suited to *descriptions* of events and courses of action — but is more difficult to apply in the context of explanations of motive. For if we are to uphold the said requirements for first-hand information it is not feasible to question party A about pary Y's motives. We must go direct to the persons concerned, i.e. to Y, but then we are in the dilemma that the representatives may here be expected to evince the same tendency.[7]

   Now, of course, it could be imagined that there are different wings in party Y which hold contradictory opinions and interests in the question at issue. The method can then perhaps still be employed. But the situation is by no means always so favourable — from the researcher's viewpoint.
2. Another rule, frequently invoked particularly by content analysts, states that in order to guard against tendencies it is advisable to take a stand on data which are as intimate and confidential as possible. The idea, then, is that opinions voiced in private, amid colleagues and friends, will be more honest and candid insofar as they are less instrumental (intended to influence) than statements in public (Holsti 1976, 44; Axelrod 1976, 253; Dahl 1967, 77).

   Many researchers presumably have experience from their empirical public material. This impression is also supported by a study of the subject made by Björn von Sydow. It sheds light on the conduct of the Swedish Social Democratic Party in some controversial issues of domestic and foreign policy in the 1950's, and demostrates an occasional glaring discrepancy between statements in public and discussions in private in the inner circle of the party (von Sydow 1978).

   But from the circumstance that internal sources can be expected to be fairly safe, it does not follow that these for their part may be adjudged wholly unproblematic as regards tendencies. It is unlikely that all non-public material is equally reliable. Even in intimate, confidential contexts there may exist an instrumental, influencing interest; the risk would then

seem particularly high in situations characterized by internal disagreement. The actual state of affairs therein must be carefully assessed from case to case.

3. Furthermore it may well be that the statements made within certain political arenas are more binding on the actors, with the result that these have less opportunity to express themselves with reference to short-term tactical needs. Foreign policy can serve as an example of such an arena. The comments made here by representatives of states normally carry great weight in other countries and in international associations. A statement therefore seems binding in high degree on the person who made it. This external restriction may be expected to impel politicians to say only what they really can stand by (Brodin 1977, 30-3).

   This is obviously a somewhat simple, crude rule. One need only recall Adolf Hitler's approach to foreign policy to realise that it hardly possesses universal validity. But the actual principle, that certain political arenas are enclosed by more and stronger restrictions than others, may of course still be reasonable. Be that as it may, it appears difficult to identify these arenas at one fell swoop. If the criterion is to be applied it should rather be a primary objective to demonstrate by argument that the arena under study may be adjudged in this sense to be special as regards tendency.

4. Another approach examines whether the declarations of motive are compatible. One may then compare either the components of one and the same declaration — e.g. in the motivation of a government bill — or of statements made in different contexts. The latter variant has been applied in content analysis so as to compare what politicians have said to different audiences (which may be expected to have given them different 'stimuli' in terms of tendency). If certain motive statements are then shown to vary with the composition of the audience, this may be seen as a sign that the trustworthiness of these elements is slight, or at least doubtful. The statements which remain constant, i.e. equally independent of the audience may, on the other hand, be regarded as constituting the actor's 'core beliefs' (Holsti 1969, 29; Holsti 1976, 44; Axelrod 1976, 255).

   It is obvious that contradictory statements should be questioned. But that the reverse is a guarantee of high validity is by no means self-evident. The failure of a politician to vary his information with regard to different audiences may simply be due to the (so frequent) realization that statements made before a group — e.g. at a trade union congress — also come to the knowledge of the opposite side (the employers). Thus one and the same message is proclaimed. But this is perhaps — just to suit all tastes — a greatly doctored version of the real motives.

   In other words, the said rule seems to work best as a method of falsification — as an instrument to question or refute certain statements. It

appears more doubtful as a means of verification.

5. Finally one occasionally has reason to question such statements as incorporate assertions which are manifestly absurd with reference to what is otherwise known in the context (Dahl 1967, 79-80). They can pertain, for example, to why a state (B) opened hostilities against another state (C). B offers a motivation that it was acting in self defence; it fended off an attack which C had just undertaken — compare the outbreak of the Korean War (Holmström 1972, 33f.). But impartial observers, it seems, give a different picture of the course of events: according to their impression thereof it was B who first attacked C.

Thus in this case an actor alleges a certain state of affairs as reason for his actions. But since it does not appear likely that this situation prevailed, the statement of motive cannot be considered reliable. Nevertheless the argument implies that there is good ground to assume that the actor in question was also aware that the situation was such as we found it to be. For it is indeed still conceivable that the government of state B was led by erroneous information to believe itself to be under attack by C and therefore took action.

As we saw, none of the said five methods for control of tendency are devoid of problems. They should rather be seen as a collection of rules of thumb. Their degree of trustworthiness must be tested from case to case. Naturally it is safest to use several rules in parallel.

We have thereby discussed two types of rule of testing: criteria of proximity and tendency respectively.[8] But there is also a third kind of control which can be applied, viz. testing of *correspondence* between motive statements and action (George 1959, 109; and Graber 1976, 69).

Measurement of correspondence signifies that we consider not only what is said but also what is done. This rule (which would seem to be firmly rooted in popular wisdom) is in practice frequently applied in motive studies. Nevertheless the purely methodical aspects of how this can and should be done have been little investigated.[9] Certain elementary bases for estimation, however, should be laid down here.

Since we are examining correspondence we relate the statement of motive to the action, and see if they appear compatible. This test can (somewhat roughly) result in four kinds of outcome (Fig. 5).

In the first case total correspondence prevails, as illustrated by the coincidence of the rectangles which represent motive statement and action respectively. The situation is in principle equally simple in the fourth case where what is said is wholly separate from what is done.

Cases 2 and 3 represent intermediate forms, and discrepancies here can, as we see, be variously expressed. On the far left we see (in both cases) a situation where part of the statement accords with the action (field a). At the same time

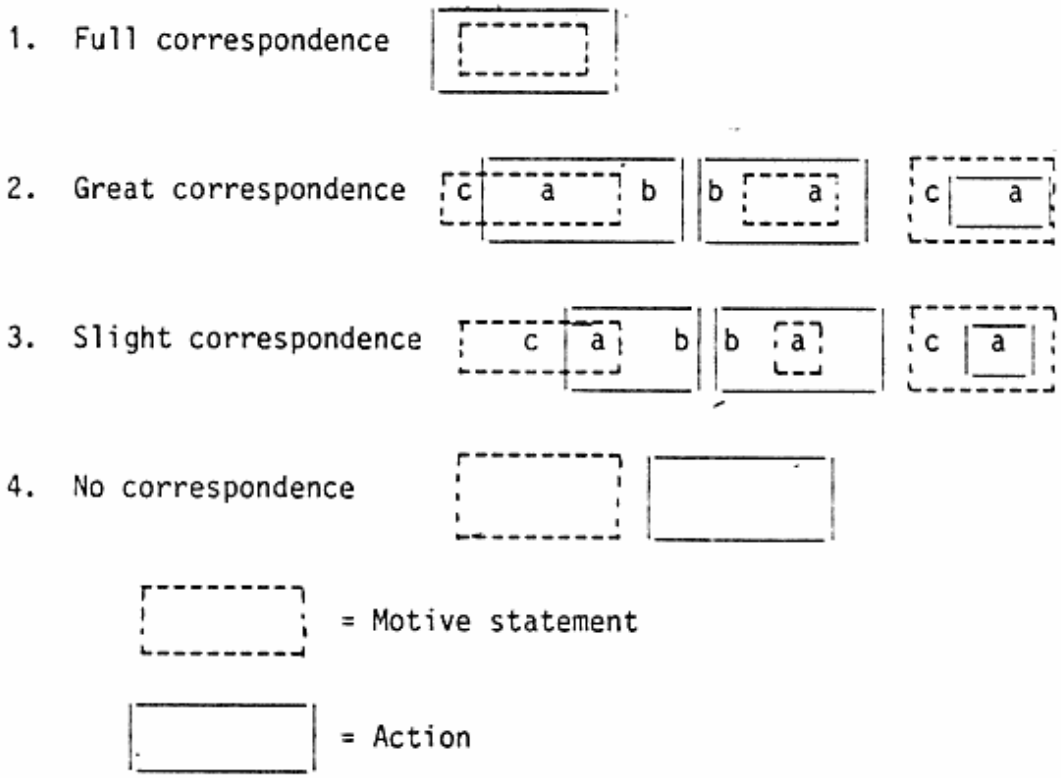


Fig. 5.

we find that a part of the action has no equivalent in the statement (field b), and that a part of the statement lies outside the action (field c). In the centre variant, on the other hand, the statement in its entirety is reflected in the action (a), but there are also elements in the action which do not conform to the statement (b). The reverse situation is illustrated on the extreme right. Here the action in all its parts was covered by the motive statement (a), but the latter also incorporates certain elements which do not correspond to the action (c).

As we see, field a consistently covers the largest surface in case 2. This must signify that the correspondence here can be designated great. In case 3, however, a is the smallest field, so that the correspondence is described as slight.

The ideal result of the test is of course outcome 1, where the correspondence is total. But the lower limit for a 'pass' should perhaps be reduced. Outcome 2 — great correspondence — can also be considered acceptable.

The actual test procedure depends on the complexity of the situation under study. But the number of alleged motives, and the number of components of the action may diverge very widely. Let us differentiate the following four cases as a simple division.

		Components of action	
		One	Several
Alleged motives:	one	1	2
	several	3	4

Fig. 6.

In the first case, where there is only one reported motive and one action component, the evaluation is in principle simple: we see the extent to which the action corresponds to the alleged motive. It becomes more difficult if the action consists of several components, as in square 2. Let us study a decision concerning changes in the rules governing acceptance for university studies. The stated aim is to enlarge the possibilities for mature students to receive an academic education. For this purpose the following measures (action components) are recommended: I) reduced qualifications in certain subjects, II) merits for experience of working life, III) merits for activity in associations, IV) merits for women who apply for male-dominated courses (and vice versa).

A single, composite estimate of the correspondence is difficult to accomplish here. It is more manageable if we test each of the action components separately against the stated objective. The total essessment then becomes a function of the outcome of the correspondence for each component. The comparison can proceed as follows. The four outcomes which we previously mentioned can be graded to a scale so that total correspondence gives 3 marks, great correspondence 2, slight correspondence 1, and no correspondence 0. The result of the test for each component can then be expressed as a numerical value. Since great correspondence was set as the limit of the acceptable, the average outcome of the tests should thereby be > 2. This means that some point could be assigned a lower value than 2 if it is balanced by values over 2 on other comparable points.[10]

In square 3, where there are several motive statements but only one action component, a similar (although reversed) measurement may be made. We must then test the correspondence between the action and each one of the alleged motives. We can thereby derive a measurement of the total correspondence. Finally we have square 4, where several motive statements and action statements co-exist. Indeed this situation is presumably of frequent occurrence. We imagine a government bill which provided the ground for legislation. A series of objectives and assessments of reality are cited as motives, while the action comprises a number of measures (and related policy instruments). The task is then to try to combine different motives and action components (which is frequently simple as being clear from the text) and then

measure the correspondence of the various pairs. Insofar as the different elements of the decision fit into an overriding pattern — e.g. to reduce taxation for the majority of taxpayers — it may be fruitful here too to weigh up the correspondence. If this is not the case, it seems more reasonable analytically to regard the different elements as separate decisions, whereby a general comparison will not be relevant.

Nevertheless it must be pointed out that a test of the correspondence cannot always be performed. Firstly, it is essential that the content of the action (and its components) be clear and unequivocal. Similarly, the motive statement (and its various elements) must be so distinct that it only 'tolerates' certain actions and 'prohibits' others. Without such reciprocal precision the comparison between the components will be more or less futile. The significance of 'the majority of taxpayers' mentioned above is fairly obvious. The expression 'high income earners' is somewhat vaguer, since there is no exact, generally accepted definition of what is a high versus a low income. The situation becomes far worse (and in terms of assessment downright impossible) if a measure is only described as benefiting 'the neglected groups' or 'the needy'.

Moreover it is mainly statements which are comparatively specific (action oriented) which can be tested. A motivation for lower taxes may incorporate e.g. considerations of how the taxes effect the labour supply, and the attitude to fairness in taxation. Such extremely general (or ideological) concepts as do not indicate a specific action can per se rarely be tested for correspondence. This can be done indirectly, via concrete proposals for measures.

For this reason, inter alia, it may be difficult to test the kind of assertion which we here called general motive statements. Firstly these lack a direct, explicit link with an action. Already this prevents a test from resulting in total correspondence. Only the second best, i.e. great correspondence, would here seem feasible. Furthermore, the general motive statements which we can use are often very abstractly formulated, which casts doubt on the testing. The narrower and more sectionally oriented the statements, the greater the possibility of executing a test of correspondence.

Notwithstanding, the possibility should not be excluded a priori that general motive statements may suffice for drawing of inferences. Whether they do or not should be examined in each individual case. If the correspondence proves great (which by definition is not impossible), they may in all reason be used as verification[11] — provided that they do not fall short of the said proximity and tendency criteria. For these forms of validity test too can assuredly be applied to general motive statements.

The difference between motivations and general motive statements as regards verification and possibility of testing can be illustrated from the following figure

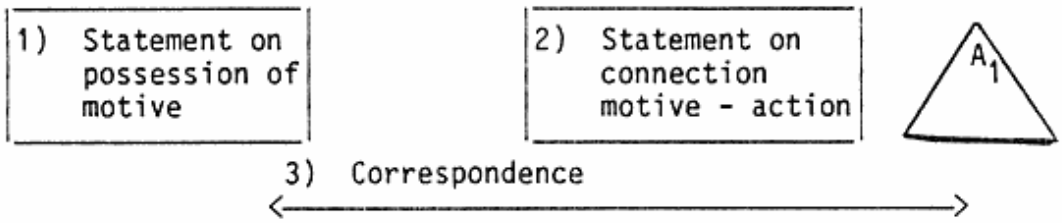


Fig. 7.

A motivation contains declarations of both types, 1) and 2), which may be subjected to proximity and tendency tests. Moreover the apparent correspondence (3) can be examined. A general motive statement incorporates only declarations concerning possession of motive (1). These may be tested with regard to proximity and tendency. The correspondence (3) too can be tested. The points which lend strength to the motivations as verification are that these alone contain declarations of connections (2), and that the correspondence testing can here normally proceed with greater precision and safety than in the case of general motive statements.

Now for the second main type of inference, those which are made on the basis of actions. Which methods of testing are suitable in these cases?

Here the premise is that we know the motives underlying the other actions which are used as support for the explanation. If then the action (A_1) resembles the others, we conclude therefore that the same motive also applies. By testing the degree of similarity between the actions we can thereby indirectly check whether A_1 corresponds to the motive in question.

If the actions are complicated in that they incorporate several essential components, some form of paired test should be undertaken. It should then be possible in principle to grade and compare the outcomes in the same way as in tests of correspondence between motive statements and actions. Here too it is a condition that the incidents for comparison are so distinct and unequivocal that tests can be performed with satisfactory precision.

Since in inferences from actions we do not take our stand on narrative sources concerning the motives, neither tendency nor proximity can be controlled in the sense previously defined. On the other hand, another form of proximity can be investigated. If an action is to be explained via reference to other actions (A_2) performed by the actor, it is required that these latter be fairly closely associated in time with the former. The shorter the interval, the safer the inference.

When we go a step further and draw conclusions about motive from the actions of other actors (A_2), we can speak of a proximity in terms of both actors and time. In the event that we refer to the actions of a specific group, we must show that 'our' actor and the group really are connected. The closer and firmer these bonds, the stronger our analogous reasoning concerning the motives.

The form of inference whereby we can only refer to interpretations of the subjective content of certain actions (A_x) would seem the most problematic. Here we have no fixed point of reference as regards time or actor. We take our stand on an assumption that all actors in a given situation have the same purpose in their behaviour. Since our knowledge of motives is based solely on common sense concepts it is difficult to find any proper form of test. 'Verification' of this kind, therefore, seems only applicable in those simple and almost trivial cases where the said assumption does not provoke a spontaneous protest. For as soon as such a protest is seriously raised, the defence becomes fraught with difficulty (from the point of view of method).[12]

When our inference from A_x is founded on scientifically derived motive theorem, we are in a stronger position in the cases where the assumption as to motive could be confirmed in other investigations. The task then becomes to show that the test situations which can be adduced meet reasonable requirements for similarity to A_1. But since the assumptions as to motive cannot be regarded as thereby confirmed — and when we for our own part, as is usual, have so few cases that the prediction capacity of the theorem cannot be tested with statistical certainty — our inference is in principle no stronger than an interpretation based on common sense. It is convincing insofar as the assumption as to motive can be taken for granted. Nevertheless we can here somewhat reinforce our circumstantial reasoning if we postulate a number of alternative theorems, and test the correspondence of each with the action (A_1). The theorem which gives the best agreement we then consider to correspond to the motive.

The safety of such a procedure is of course dependent on which alternatives are postulated. First and foremost, all of them should appear reasonable a priori. Furthermore, it is an advantage if the selection is made from a definite framework which demonstrates that 'all' essential alternatives are included (Torstendahl 1966, p. 109). This framework may consist of, for example, a number of relevant hypotheses of coalition theory, or a typology of the parties' strategic preferences.

Yet it may sometimes happen that the action (A_1) is not so sharply delineated as immediately to discriminate between different alternatives. A certain measure by one party may e.g. appear compatible per se with the objectives of election as well as internal strategy. It may then be instructive to scrutinize the context of the action, so far as to examine whether the party was then faced with a problem which can be linked to the action. If it emerges that, for example, there were internal conflicts in the party, and that the action fits into this pattern, it seems likely that motives pertaining to internal strategy lay behind the action.

This approach, viz. postulating possible alternatives which are individually tested, in the main seems preferable when the inference is substantiated by

correspondence testing (or by tests of the similarity of actions). For an explanation is always stronger the more independent variables are tested. Ideally we should also make use of as many different motive indicators as possible (Dahl 1967, 108-10; Holsti 1969, 32). Thus whenever we draw an inference we should, if possible, use and test both motive statements and different kinds of inference from actions.

> 'As with other social science predictions, faith in verbal inferences is strengthened in direct proportion to the number, variety, and assumed validity of sets of measures, verbal and non-verbal, which support and inference'

says Doris Graber (Graber 1976, 70).

But so fundamental a principle is in practice best fitted for analysis of a very limited number of actions. In large scale studies which deal with many actions — e.g. in analyses of political developments — such diligence does not always seem possible (and perhaps not worth its cost to boot).[13] It is then natural for us to concentrate on inference from motivations where such exist. For this motive indicator must, as already stated, be adjudged the strongest as it offers the most (and as regards precision normally the safest) forms of test.

In the event that motivations for an action are available we should begin by seeking the motives there. If it emerges that the sources in question conform to our requirements for proximity and non-occurrence of tendency, and that the correspondence between statement and action can be tested and prove to yield a good result, we can, in extensive studies, pronounce ourselves content therewith. But it is also conceivable that the statement will prove weak with reference to one of the said criteria. It may, for example, have the character of second-hand information, it may be contradicted by other statements, or be so vague that its agreement with the action cannot be established with certainty. Then we should reasonably have recourse also to other motive indicators. Which we should use may be determined by what is available there. But the choice of mode of inference in these cases should be supported by explicit reasoning. The same applies of course in the situations where there are no motivations at all (accessible to us).[14]

When we simultaneously use several motive indicators we must take our stand on that which seems safest with regard to available rules. This means that we have recourse to some form of alternative test. Several indicators may well appear equally reliable at the same time as they yield varying results; they specify different motives for the action. In such cases it seems reasonable to apply the following selection criterion: we select the inference which gives the broadest explanation — i.e. that which can explain and offer a pattern for several actions which can be linked to A_1.[15]

NOTES

1. Nevertheless not all declarations of motive are articulated in such (intentional) terms — occasionally they are not even worded as explanations. I have in mind the type of explanation which is de facto applied.
2. Concerning the second relation in the figure (between motive and action) I assume that it is causal. This viewpoint is disputed however. (Nordenfelt 1974 and Vedung 1982.)
3. When the actor is a collective we must sometimes be content with statements by representatives thereof.
4. An analogous reasoning is constructed as follows. If two objects, A and B, possess the qualities P_1, P_2 ... Pn in common, and A has as well the attribute Pn + 1, we conclude therefrom that Pn + 1 is also valid for B (Carney & Scheer 1974, 126-31). P_1, P_2 ... Pn are represented in our case by action qualities. Pn + 1 comprises the motive for the one action which we then assume to apply also to the other.
5. According to the accepted definition by validity we denote 'the extent to which an instrument is measuring what it is intended to measure' (Holsti 1969, 142).
6. As the opposite of the 'representations' Holsti mentions 'the instrumental model'. This does not seem to be a logical typology, however. The opposite strategy, which signifies that one tests the validity in various ways, should rather be called unrepresentational. The model which Holsti designates instrumental would seem primarily to correspond to a variant of tendency testing.
7. The problem naturally becomes even more obvious when we study the motives of individual actors.
8. A problem which I do not penetrate is that proximity and tendency criteria can sometimes collide: in a proximity perspective it may be desirable to cite data from a minister, but as regards tendency it would perhaps be safer to consult his secretary! In such a dilemma one must justify the assessment by referring to the circumstances of the specific case.
9. One of the few systematically constructed tests of correspondence is presented in Alexander George's *Propaganda Analysis.* This examines the connection between the statements by Nazi sources during the Second World War and the actions in reality. Statistical methods can demonstrate a fairly strong connection. Which criterion of correspondence is then applied in the investigation? George gives the following reply. 'Although ideally explicit rules are desirable for deciding whether or not an inference is to be regarded as correct or incorrect on the basis of the available historical evidence, no effort was made to formulate a full set of rules'. In reality two criteria were used: the accuracy of the information (which seems to be a simple variant of proximity testing) and three standards of correspondence: 'correct', 'incorrect' and 'other' (George 1959, 257 and 258-70).
10. In connection with our example we can imagine that the test of components I and II gives each 3 marks, and that component III is awarded 2 (since a considerable number of adults lack association merits). We assign 0 marks to component IV, however (since this measure does not specifically favour the mature students). The average mark is then 2.

    I borrowed the idea of testing by marks from Anckar & Ramstedt-Silén (1981, 108-9). I added the feature of grading the outcomes, and the criterion thereby calculated for assessment of the comparison. No corresponding 'cut-off point' is stated in Anckar and Ramstedt-Silén.
11. Thus it is inadvisable categorically to preclude this kind of inference, as Anckar and Ramstedt-Silén do without further argument (Anckar & Ramstedt-Silén 1981, 94).
12. How is it possible, for instance, to challenge an interpretation which says that the man we see jumping off the bridge is not a would-be suicide but a physicist seeking to test the law of gravity?
13. The requirements for certainty of the verification must be weighed against other research interests, particularly the desire to study a greater number of events. Generalized theories

would otherwise never be feasible. In this perspective it may be reasonable to test content with a more limited ambition as regards verification and methods of testing.

14. On the other hand, it seems unnecessary openly to advocate beginning with motivations where such exist. This is the natural starting point.
15. This inter alia seems to be the criterion applied by Allison in his testing of different explanations for Soviet conduct prior to the Cuban crisis. He decides in favour of 'missile power' as the most probable motive. He bases this conclusion partly on a kind of correspondence test, partly on the assertion that only this motive would produce a plausible connection between various Soviet actions in the context of the Cuban crisis (Allison 1971, 52-5).

REFERENCES

Allison, G.T. 1971. *Essence of Decision.* Boston: Little Brown.

Anckar, D. & Ramstedt-Silén, V. 1981. 'Relating Preferences to Policy. Three Problem Areas', *Advances in Content Analysis* Beverly Hills: Sage. (Ed. Karl Erik Rosengren).

Axelrod, R. 1976. *Structure of Decision,* Princeton: Princeton University Press.

Brodin, K. 1977. *Studiet av utrikespolitiska doktriner,* Stockholm: Departementens Offsetcentral.

Bryder, T. 1981. 'Actor-Reliability: Some Methodological Problems' *Advances in Content Analysis,* Beverly Hills: Sage. (Ed. Karl Erik Rosengren).

Carney, J.D. & Scheer. 1974. *Fundamentals of Logic,* New York: Macmillan.

Dahl, O. 1956. *Om årsaksproblemer i historisk forskning,* Oslo: Universitetsforlaget.

Dahl, O. 1967. *Grundtrekk i historieforskningens metodelaere,* Oslo: Universitetsforlaget.

Downs, A. 1957. *An Economic Theory of Democracy,* New York: Harper & Row.

Elvander, N. 1969. *Intresseorganisationerna i dagens Sverige,* Lund: GWK/Gleerup.

Frey, B.S. 1978. *Modern Political Economy,* Oxford: Robertson.

George, A.L. *Propaganda Analysis,* Evanstone, Illinois: Row, Peterson.

Graber, D.A. 1976. *Verbal Behavior and Politics,* Urbana: University of Illinois Press.

Holsti, K.J. 1974. *International Politics,* London: Prentice-Hall.

Holsti, O.R. 1969. *Content Analysis for the Social Sciences and Humanities,* Reading, Mass.: Addison-Wesley.

Holsti, O.R. 1976. 'Foreign Policy Formation Viewed Cognitively', in *Structure of Decision,* Princeton: Princeton University Press.

Heradstveit, D. & Narvesen, O. 1978. 'Psychological Constraints on Decision-making. A Discussion of Cognitive Approaches: Operational Code and Cognitive Map', *Cooperation and Conflict.*

Hadenius, A. 1979. 'Politiska aktörers preferenser', *Statsvetenskaplig Tidskrift.*

Hadenius, A. 1981. *Spelet om Skatten,* Stockholm.

Holmström, B. 1972. *Koreakriget i svensk debatt,* Uppsala: Rabén & Sjögren.

Jervis, R. 1976. *Perception and Misperception in International Politics,* Princeton: Princeton University Press.

Mueller, D.C. 1979. *Public Choice,* Cambridge: Cambridge University Press.

Niskanen, W. 1971. *Bureaucracy and Representative Government,* Chicago.

Nordenfelt, L. 1974. *Explanation of Human Action,* Uppsala: Philosophical Studies.

Olson, M. 1965. *The Logic of Collective Action,* Cambridge: Harvard University Press.

Riker, W.H. 1962. *The Theory of Political Coalitions,* New Haven: Yale University Press.

Schelling, T.C. 1963. *Strategy of Conflict,* New York: Oxford University Press.

Shapiro, M.J. 1981. *Language and Political Understanding,* West Hanover, Mass.: Yale University Press.

would otherwise never be feasible. In this perspective it may be reasonable to test content with a more limited ambition as regards verification and methods of testing.

14. On the other hand, it seems unnecessary openly to advocate beginning with motivations where such exist. This is the natural starting point.
15. This inter alia seems to be the criterion applied by Allison in his testing of different explanations for Soviet conduct prior to the Cuban crisis. He decides in favour of 'missile power' as the most probable motive. He bases this conclusion partly on a kind of correspondence test, partly on the assertion that only this motive would produce a plausible connection between various Soviet actions in the context of the Cuban crisis (Allison 1971, 52-5).

REFERENCES

Allison, G.T. 1971. *Essence of Decision.* Boston: Little Brown.

Anckar, D. & Ramstedt-Silén, V. 1981. 'Relating Preferences to Policy. Three Problem Areas', *Advances in Content Analysis* Beverly Hills: Sage. (Ed. Karl Erik Rosengren).

Axelrod, R. 1976. *Structure of Decision,* Princeton: Princeton University Press.

Brodin, K. 1977. *Studiet av utrikespolitiska doktriner,* Stockholm: Departementens Offsetcentral.

Bryder, T. 1981. 'Actor-Reliability: Some Methodological Problems' *Advances in Content Analysis,* Beverly Hills: Sage. (Ed. Karl Erik Rosengren).

Carney, J.D. & Scheer. 1974. *Fundamentals of Logic,* New York: Macmillan.

Dahl, O. 1956. *Om årsaksproblemer i historisk forskning,* Oslo: Universitetsforlaget.

Dahl, O. 1967. *Grundtrekk i historieforskningens metodelaere,* Oslo: Universitetsforlaget.

Downs, A. 1957. *An Economic Theory of Democracy,* New York: Harper & Row.

Elvander, N. 1969. *Intresseorganisationerna i dagens Sverige,* Lund: GWK/Gleerup.

Frey, B.S. 1978. *Modern Political Economy,* Oxford: Robertson.

George, A.L. *Propaganda Analysis,* Evanstone, Illinois: Row, Peterson.

Graber, D.A. 1976. *Verbal Behavior and Politics,* Urbana: University of Illinois Press.

Holsti, K.J. 1974. *International Politics,* London: Prentice-Hall.

Holsti, O.R. 1969. *Content Analysis for the Social Sciences and Humanities,* Reading, Mass.: Addison-Wesley.

Holsti, O.R. 1976. 'Foreign Policy Formation Viewed Cognitively', in *Structure of Decision,* Princeton: Princeton University Press.

Heradstveit, D. & Narvesen, O. 1978. 'Psychological Constraints on Decision-making. A Discussion of Cognitive Approaches: Operational Code and Cognitive Map', *Cooperation and Conflict.*

Hadenius, A. 1979. 'Politiska aktörers preferenser', *Statsvetenskaplig Tidskrift.*

Hadenius, A. 1981. *Spelet om Skatten,* Stockholm.

Holmström, B. 1972. *Koreakriget i svensk debatt,* Uppsala: Rabén & Sjögren.

Jervis, R. 1976. *Perception and Misperception in International Politics,* Princeton: Princeton University Press.

Mueller, D.C. 1979. *Public Choice,* Cambridge: Cambridge University Press.

Niskanen, W. 1971. *Bureaucracy and Representative Government,* Chicago.

Nordenfelt, L. 1974. *Explanation of Human Action,* Uppsala: Philosophical Studies.

Olson, M. 1965. *The Logic of Collective Action,* Cambridge: Harvard University Press.

Riker, W.H. 1962. *The Theory of Political Coalitions,* New Haven: Yale University Press.

Schelling, T.C. 1963. *Strategy of Conflict,* New York: Oxford University Press.

Shapiro, M.J. 1981. *Language and Political Understanding,* West Hanover, Mass.: Yale University Press.

Sjöblom, G. 1968. *Party Strategies in a Multiparty System,* Lund: Studentlitteratur.
Sjöblom, G. 1980a. 'Some Problems in the Study of Party Strategies', in *Politics As Rational Action,* Dordrecht: Reidel, (Eds. Lewin L. and Vedung E.)
von Sydow, B. 1978. *Kan vi lita på politikerna?,* Stockholm: Tiden.
Torstendahl, R. 1966. *Historia som vetenskap,* Stockholm: Natur och Kultur.
Vedung, E. 1971. *Unionsdebatten 1905,* Stockholm: Almqvist & Wiksell.
Vedung, E. 1982. *Political Reasoning,* Beverly Hills: Sage.
Whiting, A.S. 1960. *China Crosses the Yalu,* New York: Macmillan.
von Wright, G.H. 1971. *Explanation and Understanding,* London: Routledge & Kegan Paul.
Zetterberg, H. 1965. *On Theory and Verification in Sociology,* Boston: Beacon.