The substance of a shadow

A critique of power measurement methods

Don F. Westerheijden

1. Introduction

Although much has been written on the subject of power: and on its operationalization, this article is intended to shed a new light on this old question by examining it from the point of view of a theory on decision-making. My aim is to explain how small groups of individuals reach certain collective decisions. In order to do so, I use a theory of decision-making the central concept of which is power. This leads me to the problem of operationalizing power. In this paper I shall investigate some well-known solutions to this problem from the point of view provided by the theory on decision-making.

As this article is not on theory as such, I shall not elaborate on the nature of theories and their relation to scientific research, but a few words as to my standpoint would appear to be appropriate. Empirical scientists ought to strive for explanations of why things are as they are (Popper 1979: 191). In order to fulfil this task in such a manner that it becomes understandable to and examinable for other human beings, it is not sufficient to assure them that such explanations are not the result of 'merely arbitrary fancy' (Collingwood 1957: 242, 244). Instead the empirical scientist should explicitly state the principles from which the phenomena he wants to explain follow as a conclusion. In other words: he should state his theory. Now there is nothing peculiarly 'scientific' about using theories. Reaching back to Hume and Kant, Popper has shown that theories are indispensable for any perception, either in scientific research or in daily life: '(...) observation is always observation in the light of theories' (Popper 1980: 59; Popper 1965: 44–48). Peculiar to the realm of scientific research is only the demand of justification, of examinability – and accordingly the demands that the theories be explicit and consistent. In order to make a theory empirically testable, it needs to be connected to the observable world. In other words, it needs to be made falsifiable (Popper 1980: 41). This is done by introducing 'initial conditions', or 'existential axioms'. These axioms are of the
form of 'there is an A'. Contrary to the statements of the theory proper, which all are of the form 'if A, then B'. It is not always easy, however, to ascertain that there is indeed an 'A', because – as I have observed already – even the simple perception of 'A' is a theoretical event. When due account is taken of this latter insight, the initial conditions of a theory develop into measurement theories. From this exposition it should be clear that the measurement theories are rather independent parts of theory, which are fitted onto the structure of the explanatory theory.

In this paper attention will primarily be given to some measurement theories, assuming for the moment that the explanatory theory is worth trying to falsify it. The central concept of the explanatory theory is power, as will be shown in section 2. To 'observe' power several methods have been developed; the validity of these measurement methods both from the point of view of the explanatory theory and intrinsically will be investigated respectively in section 3, and sections 4 through 6. While, finally, in section 7 some conclusions will be drawn from the discussion.

2. A theory of decision-making

Decision-making is a basic activity in human – and non-human – life. Indeed, behaviour is equivalent with decision-making (Lieshout and De Vre 1985, p. 131). A consistent theory to explain why individuals or collectives choose the behaviour they perform, can be based on subjective utility (SEU) theory. In this paper a specific version of such a theory, developed in Lieshout (1984) and in Lieshout and De Vre (1985), will be used. The central axiom of SEU-theories appears to be that the probability of an individual's choosing a particular behavioural alternative is proportional to the SEU of this alternative, relative to the SEUs of all subjectively available behavioural alternatives. It seems usual to cast SEU-theories in individualistic terms, a usage I shall follow (Popper 1965: 341; Watkins 1973; Lieshout 1984: 25-26). Consequently, collective decisions must be explained from the constituent individual decisions.

In order to overcome, on the one hand, the 'emptiness' of the concept of utility, while on the other hand evading the danger of arbitrary lists of what constitutes utility, I shall assume that all behaviour requires the conversion of energy. Accordingly, the behaviour of all individuals will be geared to the command of energy (Lieshout and De Vre 1985, p. 133). The capacity an individual has to use the energy at its disposal is called the individual's power. This fits in the tradition of Hobbes's definition of power: 'THE POWER of a Man (to take it Universally), is his present means, to obtain some future apparent Good' (Hobbes 1651: 13). A definition can – taken universally indeed – be directed to any element of its environment (the individual's gathering fruit) or some reaction of another individual in doing so. If an individual can use, and energy having been gathered, individual behaviour will be geared to power. Power, accordingly, is the variable of individuals.

In social systems this rather straightforward definition is what more complicated. Defining a system as at least two interacting human individuals, the social aspect of power becomes important, of course, in the way described before. The expected reaction of individual j when i chooses a certain behavioural alternative changes the distribution of the expected behavioural alternatives of i. Changing the reaction of another individual is called influence. Individual j does not even have to interact with i. The mere expectation on the part of j (the 'law of anticipated reactions') that i will do something may be wrong, and i can alter its behaviour unhoped-for, by j.

What is most important here is the possibility of choosing behavioural alternatives according to another's behaviour. For individual i to perceive j as possessing so much power in such a manner, that j's behaviour will be a stimulus to some of i's behavioural alternatives, the social relations is not so much how much power, but the perception of power on the part of i. This is dealt with (see also: Kaplowitz 1978: 133) by defining i's reputation for power, defining the reputation for power of an individual i that individual j will have. This can also be, and promises involved in j's behaviour. reputation for power designates the words such as 'credibility' and 'prestige', the guide to one's behaviour is a high reputation 'economizes on search' (Stigler 1965). Whether a reputation for power is warranted...
obtain some future apparent Good’ (Hobbes 1981: 150). Hobbes’s definition can – taken universally indeed – be applied to behaviour of the individual directed to any element of its environment, either physical (such as the individual’s gathering fruit) or social (such as its obtaining the cooperation of another individual in doing so). Power being the energy an individual can use, and energy having been equated with utility, it follows that individual behaviour will be geared exclusively to the maximization of its power. Power, accordingly, is the variable that explains the behaviour of individuals.

In social systems this rather straightforward reasoning becomes somewhat more complicated. Defining a social system as a system in which at least two interacting human individuals (i and j) exist, the so-called relational aspect of power becomes important. Both individuals i and j behave, of course, in the way described before, i.e. both strive for power. So the expected reaction of individual j will change the probability that i will choose a certain behavioural alternative, if and only if, j’s expected reaction changes the distribution of the expected amounts of power for the behavioural alternatives of i. Changing the probabilities of behaviour of another individual is called influence. In order to influence individual i, individual j does not even have to intend to influence it, according to this theory. The mere expectation on the part of i that j will react may do the job (the ‘law of anticipated reactions’) – though undoubtedly, i’s expectations may be wrong, and i can alter its behaviour in ways unintended, even unthought-for, by j.

What is most important here, is that individuals in a social system choose behavioural alternatives according to their expectations of one another’s behaviour. For individual i to be influenced by j, it only needs to perceive j as possessing so much power, and using that power in such manner, that j’s behaviour will be a sanction (either positive or negative) to some of i’s behavioural alternatives. Consequently, what counts in social relations is not so much how much power the individuals actually possess, but the perception of power on the part of the individuals they interact with (see also: Kaplowitz 1978: 133). In other words, what counts is an individual’s reputation for power, defined as the expectation on the part of individual i that individual j will have the power to carry out the threats and promises involved in j’s behaviour (Lieshout and De Vree 1985: 136).

‘Reputation for power’ designates the same phenomenon as is covered by words such as ‘credibility’ and ‘prestige’. Letting reputation for power be the guide to one’s behaviour is a highly probable choice, because reputation ‘economizes on search’ (Stigler 1961: 224). Whereas trying to find out whether a reputation for power is warranted may lead to risky escalation
of the process (De Vre: 1982: 179–182; Lieshout and De Vre: 1985: 137–
138). However, not only j's reputation for power in i's eyes is concerned here, but also i's own power, or rather: i's reputation for power according to i itself. An individual i that considers itself to be very powerful will not concede to the threats or promises of an individual j it perceives as powerless, no matter how heavy the sanctions that j threatens to use. So it is not just j's reputation for power that i reacts to, but the relative reputations for power of all individuals involved in the interaction (including itself). But as may be expected in a matter as 'shadowy' as reputations: these expectations may prove to have been wrong (without 'substance', as it was put in the title of this paper), which accounts for both 'underreactions' and 'overreactions' — labels that can be used only *a posteriori*. Whether the subjective guesses at the reputations for power were wrong or right will, accordingly, appear only after both i and j have acted out their choices. This information may then be used by them, or by other individuals k, in their relations to i or j in later interactions.

Before entering into the subject of this paper, a few words about the kind of social system are in order. Some of the statements that are to follow are supposed to be valid for any social system; most are valid for social systems with differentiated positions; and some are valid only in formal organizations. Usually I shall state the condition explicitly with the statements. As decision-making studies are practically always carried out in formal organizations, these initial conditions will hardly ever constitute a problem.

3. Explanatory theory and measurement theories

In the previous section I explained how, according to the theory of decision-making under investigation, the concept of 'power' develops into 'reputation for power'. To connect this latter concept to observations, measurement theories need to be introduced. For the closely related concept of power, principally three measurement methods have been developed during more than three decades of research, viz. the positional method, the reputational method, and the decision-making method (see e.g.: Aiken and Mott 1970: 193–197; Mokken and Stokman 1976: 53). These methods suited to test hypotheses derived from my theory of decision-making, and if so, which one is the best? The answer to this question depends on the answers to two other questions. The first of these is: Are the measurement theories themselves consistent, i.e. are the observational techniques valid? Secondly: Which of these methods is most valid from the point of view of the explanatory theoretical techniques that make up these measurements (sections 4 through 6), but first I shall discuss the former.

The 'theoretical' validity referred to is the conceptual validity: Do the methods measure? Disregarding the dependence on a decision-making process, the question is whether these methods are indicators of (or in my mind, it seems that all three methods measure) in what way, I shall explain in the following.

Figure 1: Conceptual scheme and measurements

![Diagram]

3.1. The positional method – The positional measurement method of low relevance, because it would not tell the individuals in the process, something about the base of j’s power, with its power base, nor about how or why. Perhaps this explains why the position method was used, while other methods (see: Walton 1966: 4) were used, most notably by Mills (1959), when studies on the national level, not within a company.

The conceptual validity of the positional decision-making processes, however, is not...
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Ordered how, according to the theory of decision, the concept of 'power' develops into a complex system of variables, it is important to connect this latter concept to observations, which are then used to test the theory. For closely related concepts from different measurement methods, we can develop hypotheses such as the positional method (see: Mokken and Stokman 1976: 53). Are these hypotheses derived from the theory of decision-making method is the best? The answer to this question depends on other questions. The first of these is: Are the hypotheses consistent, i.e. are the observational and theoretical constructs consistent? Which of these methods is most valid from

the point of view of the explanatory theory? I shall discuss the observation of measurement techniques that make up these measurement methods in separate sections (sections 4 through 6), but first I shall discuss the second question.

The 'theoretical' validity referred to in the second question is the conceptual validity: Do the methods measure what the theory says should be measured? Disregarding the dependent variable, i.e., individual behaviour in a decision-making process, this comes down to the question whether these methods are indicators of (relative) reputations for power. To my mind, it seems that all three methods can be connected to this variable; in what way, I shall explain in the following sub-sections (see also figure 1)

3.1. The positional method – The positional method is often seen as a measurement method of low relevance, because it would 'only' tell the researcher, as it would tell the individuals involved in the decision-making process, something about the base of j's power, but nothing about what j does with its power base, nor about how other individuals perceive j's power. Perhaps this explains why the positional method is little used in power studies. More than ten years after Hunter (1953) more or less started the issue, Walton did not note any community power study in which only the positional method was used, while he found only four studies (7%) in which the positional method was used in combination with one or more other methods (see: Walton 1966a: 431-432). Yet this method had been used, most notably by Mills (1959), which is, however, a study of power on the national level, not within a community.

The conceptual validity of the positional method in research into decision-making processes, however, is not as low as it would appear from its...
low popularity. The positional method derives its conceptual validity from the systemic environment in which decision-making processes are studied (Felling 1974: 58). If all positions were equal, 'position' would not be a variable and could not provide an individual with information concerning another individual's power. But if different positions exist, there are differences with regard to available resources, (rights of) access to information, (rights of) access to individuals in other positions, rights and obligations to make certain decisions, etc. Waltz accordingly argued that a system's structure is defined by the positions of its elements (specified by functional differentiation), and by the distribution of capabilities over the elements (Waltz 1979: 79-101). The information provided by 'position' becomes more valuable, the more institutionalized the system's structure is; accordingly, position might be defined as institutionalized reputation for power. But it is only a power base that is indentified (i.e. possibilities for behaviour), not how the individual occupant uses its power base (i.e. behaviour). On the other hand, when investigating individual behaviour in organizational contexts, organizations being highly institutionalized social systems (Lieshout and De Vree 1985: 139), one always studies the behaviour of 'players in positions', and quite often, positions will provide narrow enough constraints on behaviour to give rise to the dictum 'where you stand depends on where you sit' (Allison 1971: 164, 170).

Occupying a position in the social system of an organization is a necessary prerequisite for any individual wishing to influence that organization's behaviour. Furthermore, it may be argued that in a formal organization 'position' is the only important 'objective' power base", because the use of other 'objective' power bases such as resources and physical power is practically always prohibited by the organizational rules. This makes it relatively improbable that such power bases will be used - though not quite impossible (see: Lieshout and De Vree 1985: 140). To other participants using the information contained in an individual's position is an efficient behavioural alternative. For it is rather easy to discover which position an individual occupies in a context of formal organizations (indeed, sometimes one knows only the positions, but not even the names of participants in a decision-making process). As the position of an individual is information a researcher can obtain rather easily too, the positional method certainly deserves attention.

The way observations are made in the positional method will be labeled here the 'positional technique', which I shall discuss in section 4.

3.2. The reputational method - The reputational method became popular at the same time community power studies became popular, i.e. when Hunter's Community power structure was amounts to asking either random or specially selected individuals ("informants"), by way of interviews or questionnaires, about the (relative) power of other individuals that respondents are capable of giving in. The method was also employed in the study of members of the social system under investigation. In this way, selected individuals, chosen because of their knowledgeable positions (Hunter 1953; Scott 1974: 126), were asked about their knowledge of the system, and were then compared with each other. This kind of research, so the reputations of the highest, was used to estimate the validity.

The observational techniques are used as an auxiliary technique, the 'position', and, primarily, interviews. The research design is described in section 5.

3.3. The decision-making method - A study of individual power and individual behaviour is itself a study according to the pattern for the basic tenet of this method is that the power of an individual's behaviour (Dahl 1961). In this article the decision-making method will be interpreted as a method at the beginning of a decision-making process on the collective decision. The concept is founded on the insight that i's perception of j's former behaviour. An individual's decision is made by means of the decision-making method. '(..) for each decision i was determined alternatives that were finally adopted by others, or had proposed alternatives that were then tabulated as individual "participating in the greatest proportion of decisions were then considered to be members of the decision-making process)..." where the number of direct contacts between persons during the period under investigation to assess the former successes and failures
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Hunter’s Community power structure was published (1953). Essentially, it amounts to asking either random or systematically selected individuals (‘informants’), by way of interviews or written questionnaires, to assess the (relative) power of other individuals. In this method, it is supposed that respondents are capable of giving relevant answers, because they are members of the social system under investigation. Often the respondents are selected individuals, chosen because of their presumably especially knowledgeable positions (Hunter 1953: 263-265). This method has been scorned by many political scientists, because it is said not to measure power, but only reputation for power (Wolfgang 1960; Aiken and Mott 1970; Drewes 1974: 164). That would hardly be called a drawback here! To the contrary, reputation for power is exactly the key independent variable in this kind of research, so the reputational method would be the one with the highest conceptual validity.

The observational techniques employed in the reputational method are, as an auxiliary technique, the ‘positional technique’ (to select the informants) and, primarily, interviews. The latter technique will be discussed in section 5.

3.3. The decision-making method — A study into the relationship between individual power and individual behaviour in a decision-making process is in itself a study according to the pattern of the decision-making method, for the basic tenet of this method is that an individual’s power appears in its behaviour (Dahl 1961). In this article, however, the decision-making method will be interpreted as a method to assess an individual’s power at the beginning of a decision-making process, in order to predict its influence on the collective decision. The conceptual validity of this method is founded on the insight that ‘i’s perception of j’s power is largely a function of j’s former behaviour. An individual’s former behaviour can be assessed by means of the decision-making method — in Dahl’s (1961: 336) words: ‘(…) [F]or each decision [it was determined] which participants had initiated alternatives that were finally adopted, had vetoed alternatives initiated by others, or had proposed alternatives that were turned down. These actions were then tabulated as individual “successes” or “defeats”. The participants with the greatest proportion of successes out of the total number of successes were then considered to be the most influential”. The decision-making method as it is generally implemented, is confined to comparing the influence of several individuals within a single decision-making process (…) where the number of direct participants is more or less the same during the period under investigation’ (Dahl 1961: 332). When using it to assess the former successes and failures of individuals, the situation is
different. For then the researcher tries to find information about many decision-making processes, because every individual that is involved in his study had its own previous career and was involved in decision-making processes not shared by the other individuals it now interacts with. Consequently it is no use counting successes and defeats of all individuals that happen to meet each other in the decision-making process under investigation, and to compute their respective ‘proportion of successes out of the total number of successes’, because the total number of successes is only defined within a single set of decisions-cum-participants (see: Dahl 1961: 124). A variant of the decision-making method has therefore to be developed.

The crucial concept in this variant is the former career of each participant. Because that is the subject about which i can obtain information to base its expectations on regarding j’s power. In colloquial terms: What did j do, and how successful was he? This question points to two kinds of data that are useful here: the latter part of the question asks for j’s successes and failures with regard to the decision-making processes he was involved in, while the former part relates to the positions he occupied. This variant of the decision-making method appears to be linked to the positional method! Yet this is not really a surprising result, for just as the present position an individual occupies informs other individuals about its present power, its former positions provide information (hence: a reputation) about the power it then had.

The former career can also give some information on the individual’s use of its power base, because acquiring a position is in itself a reward for success in still earlier positions. More directly useful to that end, however, is experience or other information about the former behaviour (successes and defeats, as Dahl called it) of the individual (Kaplowitz 1978: 141).

A researcher, conducting ‘retrospective’ research, can obtain the required information by means of the ‘positional technique’, by interviews with informants, or by content analysis of documents, newspapers, etc. The technique of participant observation, which would be possible in ‘synchronous’ research (see e.g.: Dahl 1961: vi), cannot be used in retrospective research, and I shall not discuss it. Content analysis, on which the decision-making method leans most heavily, will be discussed in section 6.

4. The ‘positional technique’

The ‘positional technique’ involves determining the importance of the positions in a social system; from (general) position the researcher concludes to the influence. The power base ‘position’ must induce an occupant (Aiken & Mott 1970: 193; Fellin 1977: 194) directed at the absence of a clear relation between used energy: an individual’s position produces its influence (Braam & Swinkels 1969: 97). Such criticisms skip over the fact that do not confine themselves to what is stated: position is an important component of its social systems it is not surprising that position is too well, but it should be surprising power base. Indeed I have argued in section in the context of formal organizations, its reputation for power. But why is a position the power that is in a position? For in position to do something is not a desk in an official setting. While power, in social relation to an individual j can affect i’s expected utility definition of reputation for power. It is power to it in so far as it has the expectations about the extent i has such expectations, j’s position that this situation will prevail is the high power social system is. In a context of formal researcher can justifiably treat the formal indicator of reputation for power.

The set of positions that are relevant in positions that are involved in the decision-making processes both all positions officially and use so effectively or not) and all positions that. A certain measure of – as far as we can remain with regard to the decision of what to the decision-making process one is sure making I want to test pertains to be valid decision-making process. The explanatory decision; the presence (hence: the definiteness) process is an initial condition for it. If, in the decision-making in a cabinet, one focus small enough to make inclusion of all possible though rather laborious and not always
positions in a social system; from (generally: formal) characteristics of a position the researcher concludes to the individual occupant’s having more or less power than occupants of other positions. For this procedure to be valid, the power base ‘position’ must indeed provide usable energy to the occupant (Aiken & Mott 1970: 193; Felling 1974: 58). Often criticism is directed at the absence of a clear relation between position and successfully used energy: an individual’s position proves to be not a good predictor of its influence (Braam & Swinkels 1969: 90; Aiken & Mott 1970: 193; Helmers e.a. 1975: 71). Such criticisms skip one step in the argument, for they do not confine themselves to what is stated here, viz. that an individual’s position is an important component of its power. According to theories of social systems it is not surprising that position and influence do not correlate too well, but it should be surprising if position did not provide a power base. Indeed I have argued in section 3 that an individual’s position is, in the context of formal organizations, its only power base, apart from its reputation for power. But why is a position a power base? What determines the power that is in a position? For in itself a position ‘is’ not power; a position ‘is’ nothing but a desk in an office-building, or a title some individual uses. While power, in social relations, is the belief on the part of i that an individual j can affect i’s expected utility – to paraphrase once more the definition of reputation for power. It follows that j’s position brings power to it in so far as i has the expectation – or the experience – it does. To the extent i has such expectations, j’s position is important to i. The chance that this situation will prevail is the higher, the more institutionalized the social system is. In a context of formal organizations, therefore, the researcher can justifiably treat the (formal) hierarchy of positions as a valid indicator of reputation for power.

The set of positions that are relevant in a research is defined as all positions that are involved in the decision-making process; this set should include both all positions officially and usually involved (whether they are so effectively or not) and all positions that are involved on an ad hoc basis. A certain measure of – as far as I can see: unavoidable – subjectivity remains with regard to the decision of what does and what does not belong to the decision-making process one is studying. The theory of decision-making I want to test pertains to be valid for all individuals and for any decision-making process. The explanatory theory cannot therefore help in deciding; the presence (hence: the definition) of a certain decision-making process is an initial condition for it. If, for example, one decides to study decision-making in a cabinet, one focuses on a single organization that is small enough to make inclusion of all positions into the research possible, though rather laborious and not always necessary (namely when coali-
tions between individual ministers are present). If, to the contrary, the bringing about of a certain public policy is the research-problem, then it is not just the cabinet one has to study, but also the official organizations that prepared the decision, the advisory bodies that were involved, parliament, and the organizations that implemented the decision. In such studies reduction of the number of 'relevant' positions is necessary. A valuable resource for the researcher will often guide his subjectivity in such problems.

From these arguments one can conclude that in a study into decision-making processes in the context of formal organizations the positional method is methodologically valid; it takes account of the systemic nature of organizations. Its results are intersubjectively examinable, once the definition of 'important' organizations and positions is given.

5. Interviews in the reputational method

Without a doubt interviews and questionnaires are by far the most popular methods to gather data in the social sciences (Webb et al. 1966, 2; Phillips 1971: 13). Yet empirical results of tests of answers to interview-questions give ample reason to question this popularity (Van Kool wijk 1974: 9): inconsistencies between answers and other measurements only too often range as high as twenty or thirty percent, or more. This kind of results is even reached when purely factual questions are checked against written data in files (see e.g.: Webb et al. 1966, Phillips 1971: 22-26; Dijkstra and Van der Zouwen 1977: 56; Van der Eijk and Niemöller 1979). And the results for variables such as attitudes or perceptions are no better -- to say the least. An additional problem with the latter kind of data is that it is difficult to check them against other measurements (see e.g.: LaPiere 1934; Phillips 1971: 27; Sudman and Bradburn 1974: 7; Dijkstra and Van der Zouwen 1977: 60; Dijkstra and Van der Zouwen 1978; Gutek 1978; Lieshout 1984: 36). These empirical results give rise to doubts concerning the methodology of interviewing, if interviews are used to ascertain anything but the respondent's verbal reactions to certain stimuli, for the inconsistencies that are persistingly found cannot simply be ascribed to failures in designing or carrying out the interviews.

The heart of the problem seems to be that during an interview socio-psychological and social processes take place (Phillips 1971: 53; Sudman and Bradburn 1974: 6; Dijkstra and Van der Zouwen 1978: 60). An SEU-theory explaining individual behaviour might be applicable in this situation too. The difference with section 2 being that informants in an inter-
view find themselves in another kind of situation than individuals trying to influence the ‘behaviour’ of an organization.

Some aspects of such a theory seem to be the following. All observations or perceptions of an individual are a subset of all possible observations. The same goes for an individual’s memory: what an individual stores in its ‘long term memory’ is a subset of all its observations. And what it can recall from its ‘long term memory’ on a later moment is a subset of all stored data (see: Lindsay and Norman 1977). The formation of these successive subsets amounts to a number of choices, based on the subjective expected utility of directing attention to this, and not to that, phenomenon, storing this, and not that, observation in memory, etc. Therefore an individual will probably not be able to recall information that was not important to it on the time it ‘encountered’ this piece of information, or that did not fit into its then existing system of information (Festinger 1957; Norman 1976: 65-81; Janis and Mann 1977: 203-218; Baddeley 1979; Lishout 1984: 50).

With respect to the importance of the information an interviewer seeks to obtain from an individual there are fairly large differences between survey-interviews and informant-interviews. To random individuals the question who is the most powerful individual in organization A will in all probability be of minor importance, at best. Random individuals will therefore often give random answers; Converse (1970) called this the problem of ‘nonattitudes’. Informants, on the other hand, are selected individuals; they are selected because they are in positions that make it probable for them to have a vivid interest in knowledge of the social system of organization A. Their answers will probably not be random—they might even give valid answers, though it appears that ever answers by informants cannot universally be relied on (Sudman and Bradburn 1974, 54-55; Deliens and Van Geet 1984).

Whether an informant will give valid answers is a function of the expected utility of such behaviour to the informant: does he think it to be more useful to give accurate information, or is it in his perceived interest to conceal as much as he can? Informants may change their valuation of these behavioural alternatives any time before or during the interview (Dijkstra and Van der Zouwen 1978: 63). The interviewer’s behaviour can influence the informant’s valuation (see e.g.: Scheuch 1967: 99 ff). More important than the interviewer’s behaviour during the (non-recurring) interview will be, according to SEU-theory, how threatening the subject of the interview seems to the informant. In surveys the researcher can convincingly give his respondents a guarantee of anonymity. The respondent’s answers can then only influence his utility when the results of the total re-
lead to changes in the environment of the respondent, for example through a change in the state’s policy (Scheuch 1967: 112-115). To informants a guarantee for anonymity — if any is given — will sound less convincing. For the number of informants is never large, and other individuals in the social system may have ways to find out who acted as an informant, so that being an informant may have personal consequences, viz. when others perceive the informant as a threat to their reputations for power and are willing to mete out sanctions accordingly. It has to be assumed, therefore, that informants will not completely trust the researcher’s guarantee of anonymity. Moreover, the ‘behaviour’ of the organization will never correspond completely to the preferences of any one individual involved in the decisions, and for that reason questions pertaining to those decisions are probably threatening to the reputations for power of at least some of the informants. One has to conclude from these two points (the possible lack of anonymity and the possibility of threatening questions), that the chance of an informant’s responding unfailingly valid is rather small. Let alone the chance that all informants in a research do so (Esser 1981: 83). Hence follows the methodological doubt regarding the use of interviews as a data-gathering method.

What will be the consequences of an individual refusing to cooperate as an informant? In the first place, the consequences will be larger than in survey-interviews, because the number of informants is lower than the number of respondents in a survey. More importantly, in a survey one individual’s information is as good as the information of another individual, but missing one respondent in a decision-making study means missing one row in the matrix of reputations for power. The consequence is, therefore, that the behaviour of the non-responding individual becomes inexplicable. There is no solution to this problem: the researcher can only try to prevent its occurrence.

The last problem in using interviews in the reputational method I wish to mention here, is the problem of ‘retrospective distortion’ (Sudman and Bradburn 1974: 67-92). This problem exists for attitudinal and perceptual data because individuals can and often do learn: they adapt their information to their experience (including experiences communicated to them by other individuals) in order to react in an efficient way to their changing environment (De Vree 1982: 64). In the process of adapting information, at least part of the old information is lost. So it is to be expected that the answers in a later interview will be contaminated by i’s experiences with regard to j since then (see: Goethals and Reckman 1973). And correction of i’s answer by the researcher is impossible, because no one but i can tell what i’s original perceptions were. Even if, therefore, the information a researcher could obtain from interviews is ‘valid’ — but as I explained before there is sufficient — would still be faced with the problem of context. Most research is ‘retrospective’ in depth; these problems only strengthen the doubt on the relevance and validity of data produced by interview.

6. Content analysis in the decision-making model

Content analysis is to be evaluated here as a test of an individual’s former career, which includes his/her behaviour. As regards the individual’s former career, that other participants in the decision-making have a generally correct notion of it. Because the individual’s present position, it is easily deducible. The researcher can then apply the ‘position’ over each individual’s career.

Concerning the individual’s former behaviour in trying to influence the ‘behaviour’ of other individuals, somewhat analogous situation pertains — but not everywhere. Other participants can form a perception of the individual either purely from his/her proboscis — by means of any form of communication of the individual, hearsay, letters to and from individuals in the media. But to a researcher, not being a part of the organization, only the messages in the media, perhaps, in letters, diaries, or memoirs are more or less hearsay. What is needed then is, first, the assumption that the researcher needs a theory to connect the individual’s successes and defeats.

As to this assumption, it cannot be argued that the information the researcher can obtain about relevant information that is in the social system, to assume that the unknown part of the information can be read in the newspapers etc., if only by communications they seem relevant to them (Dohout and De Vree 1983: 144-145). Which assumption that is needed. Moreover, in this approach all participants reach the same valuation of the
environment of the respondent, for example in the policy (Scheuch 1967: 112–115). To infer validity – if any is given – will sound less convincing, since the individual may have personal consequences, viz. that they are seen as a threat to their reputations for power and decision-making accordingly. It has to be assumed, therefore, that completely trust the researcher's guarantees of the 'behaviour' of the organization, will never preclude the preferences of any one individual involved and will not distort the behaviour of the organization for the rest of the individuals. At least some of the decision-makers might agree with this. Let us assume for the sake of argument that the individual's present statement is valid. The researcher can then apply the 'position technique', accumulating evidence over one individual's career.

A. Content analysis in the decision-making method

Content analysis is to be evaluated here as a technique to obtain data about an individual's former career, which includes former positions and former behaviour. As regards the individual's former positions, it can be assumed that other participants in the decision-making process will have a generally correct notion of it. Because, just as has been said about the individual's present position, it is easily obtainable information for them. The researcher can then apply the 'position technique', accumulating notes over each individual's career.

Concerning the individual's former career (its successes and defeats in trying to influence the 'behaviour' of organizations it was involved in) a somewhat analogous situation pertains – but the differences are important. Other participants can form a perception of the former selflessness of the individual either purely from their own thoughts, or – more probably – by means of any form of communication, e.g., the appearance of the individual, hearsay, letters to and from other participants, or messages in the media. But to a researcher, not being a member of the social system of the organization, only the messages in the media are available, and perhaps, in letters, diaries, or memoirs of some participants, part of the hearsay. What is needed then is, first, the assumption that this information will lead to the same valuation as is made by the participants. And, second, the researcher needs a theory to connect the contents of this information to the individual's successes and defeats.

As to this assumption, it cannot be argued very easily. For it is clear that the information the researcher can dispose of is only part of the relevant information that is in the social system, and there is ample reason to assume that the unknown part of the information is different from what can be read in the newspapers etc., if only because people will make communications they deem useful to themselves (Simon 1976: 163; Lighthouse and De Vree 1965: 144–145). Which is exactly contrary to the assumption that is needed. Moreover, in this assumption it is supposed that all participants reach the same valuation of the individual. While it is to be
expected, because of differences in the information the participants get and differences in their points of view, that they reach different valuations, and consequently different reputations for power of the individual, as has been argued in section 2.

Here the private letters, diaries and memoirs of participants might play a role in research. On the one hand, the researcher might want to use this information simply in addition to what he extracted from the media. On the other hand, letters, diaries and memoirs could be used to explain the individual differences in reputations for power of a certain individual. The latter way of using such information is in accordance with the subjective character of reputations for power. Also, it points to the weakness of using such information in the first way just described. For it is not to be expected that all participants have the same information, and as usually only a few random participants make their letters available, keep diaries, or write their memoirs, the researcher is not in a position to find out whether the use of this information is warranted by its having been known to a considerable number of the participants. The researcher has to choose between either not using this information (thus being sure that the information he uses was known to many participants, resulting in measurements of successes and failures that are representative of a communis opinio in the social system) or using it (arguing that more information will give more precise measurement, but with uncertainty about the extent to which this information was known to more than a few participants, thus risking to get biased measurements of successes and defeats).

Notwithstanding the doubts expressed, the assumption that the measurements by the researcher agree to a large extent with the valuations of many participants remains necessary if content analysis is to be used.

The researcher also needs a theory to connect the contents of his information to the individual successes and defeats. This amounts to a theory of content analysis. For my purpose a relatively simple theory would suffice, because only the 'linguistic representation' of facts is of interest (see: Krippendorff 1980: 42-44). A ready-made theory of this kind does not seem to exist, '[p]erhaps ... because human analysts are so efficient in interpreting linguistic assertions referentially' (Krippendorff 1980: 44). Such a theory would have to state that messages mean what they appear to mean, given the syntax and semantics of the language. And it should incorporate the assumption that the messages are true (i.e., the facts that are stated indeed existed), or at least mostly true, unless there is evidence to conclude to the contrary. This assumption is not unproblematic, but as it is often more difficult to lie consistently than to state the truth, and, moreover, truthful information has the value of making life more predictable to

7. Conclusion

As long as there does not exist a consistent theory, it would seem wise to 'triangulate' with another method, as also (e.g., Webb e.a. 1966). This advice is based on the several methods measure the beginning of the argument of opinion, discussed in this article all pertain to measuring such seemingly straightforward reasonability power – with the noteworthy exception of webb's discussion, measurement methods and the point of view provided by the theory suggests a different explanation, as expected it appeared that the three methods measured 'dimensions' of power; in this paper the positional method points primarily to the decision-making method refers to
the information the participants get as a result of the interaction. However, the information that they extract from the party media and the researcher’s reports may not be accurate in all cases. The researcher might want to use this information to get a better understanding of the participants’ behavior and to draw conclusions about their positions in the community. The researcher may use this information to identify common patterns and to compare them with those in other communities. The researcher may also use this information to detect any discrepancies or inconsistencies.

In this way, the researcher can gain a better understanding of the participants’ behavior and their positions in the community. The researcher may also use this information to detect any discrepancies or inconsistencies. The researcher may also use this information to detect any discrepancies or inconsistencies.

7. Conclusion

As long as there does not exist a consistent and corroborated measurement theory, it would seem wise to ‘triangulate’ the findings of one measurement method with another method, as the researcher is often advised to do (e.g., Webb et al. 1966). This advice can only be followed if it is supposed that the several methods measure the same phenomenon. Which would follow from the beginning of the argument of operationalization: the three methods discussed in this article all pertain to measure the same phenomenon. Yet such seemingly straightforward reasoning led all researchers of community power — with the noteworthy exception of Dahl (1961: 336) — to confusing results, for the agreement between the three (and other) methods appeared to be far from perfect (see e.g.: Freeman et al. 1963). One of the first explanations (or rather a ‘meta-explanation’) was given by Walton (1966a, b) who discovered substantial relations between empirical findings, measurement methods and the disciplines of the researchers. The point of view provided by the theory of decision-making proposed here suggests a different explanation, as exposed in section 3 (see figure 1). For it appeared that the three methods measure what Clark (1967) called different ‘dimensions’ of power; in this paper these are different variables: the positional method points primarily to an individual’s power base, while the decision-making method refers to the use of the perceived power base.
by the individual in former times, and both are a ‘base’ for the reputation for power, measured more directly by the reputational method. An explanation of this kind implies only slight possibilities to check the results of one measurement method by means of the results of another method\(^{11}\).

What is more, it does not give a definite answer to the question discussed in this paper, viz. which of the commonly known methods of measurement provides the best operationalization of power, as this concept appears in the explanatory theory, i.e., the best operationalization of reputation for power. For the results of my discussion regarding the validity of the primary observational techniques of each method were more or less contrary to those regarding the conceptual validity of the methods (see figure 2). It seems – as happens so often – that the researcher has to trade off two types of validity: valid measurement produces data with the lowest (though not very low) conceptual validity, while the data with high conceptual validity are obtained by means of the least valid observational technique.

**Figure 2: Validity of measurement methods and observational techniques**

<table>
<thead>
<tr>
<th>Method and Technique</th>
<th>Conceptual Validity</th>
<th>Validity of Primary Observational Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positional method/position</td>
<td>lowest</td>
<td>highest</td>
</tr>
<tr>
<td>Positional technique</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reputational method/interview</td>
<td>highest</td>
<td>lowest</td>
</tr>
<tr>
<td>Decision-making method/content</td>
<td>intermediate</td>
<td>intermediate</td>
</tr>
<tr>
<td>Analysis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A more satisfactory solution would seem to lie in a different interpretation of the advice to use several methods of measurement, viz. to use the three methods in conjunction to produce a single ‘measure’ of reputation for power. When testing the explanatory theory in a highly institutionalized social system (as in the context of formal organizations), the positional method would give relatively easily obtainable data. The observations of former positions and of former behaviour, together constituting the decision-making method (which is intermediate on both dimensions), can refine this ordering of individual participants in the decision-making process. Final refinements can then be made using the reputational method. Especially with these last refinements the researcher will have to keep the limited validity of the observational technique in mind. In this way I think a reasonable and justifiable combination of the several methods of measuring individual power can be constructed, giving an adequate basis for a rational behaviour within the context of formal organizations, thus making the test of consistency with reality possible.

This research has been supported by the Netherlands Organisation for the Advancement of Research in Politics and Public Administration (NWO) and the Netherlands Organization for the Advancement of Research in the Humanities (SWO).

The title of this article is inspired by the title of another article by the same author, which has been published in the same journal.

For their criticism on the draft of this paper I would like to thank the editors and, especially, Prof. Dr. J.J.A. Thomassen.

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**Notes**

1. To derive testable hypotheses on decision-making further than will be done in this article, showing the importance of power. For a more complete and more satisfactory treatment of power, including theorems on decision-making, see M. W. De Vos (1984) and Lieshout and De Vree (1985).

2. A system is defined as ‘any set of elements that the conduct of any one of them is influenced by the conduct of any other of them’ (H. J. A. 1982: 19). The boundary of a social system is the set of connected relations.

3. Accordingly, in this theory there is no place for the ‘influence’ of the beholder, the individual’s opinion or the individual’s foundation of its behaviour.

4. Another topic of research in which positivism is the basic method is the study of interlocking business (or government) of persons holding memberships in more than one organization. The relationship between interlocking positions and the influence of the individual is a major focus of this article. Finally, ‘interlocking positions’ being used for whole nations (as in the case of the United States); their network approach, furthermore, is not considered in this article.

5. I should like to emphasize here that, in
a reasonable and justifiable combination of the three methods of measuring individual power can be constructed, by means of which a theory of rational behaviour within the context of formal organizations can be put to the test of consistency with reality.

This research has been supported by the Netherlands foundation for scientific research in politics and public administration (NESPOB), which is subsidized by the Netherlands Organization for the Advancement of Pure Research (ZWO). The title of this article is inspired by the title of a chapter in Dahl (1961).

For their critique on the draft of this paper I wish to thank prof. dr. J.K. De Vree, prof. dr. J.J.A. Thomassien, and, especially, dr. R.H. Lieshout.

Notes

1. To derive testable hypotheses on decision-making, the theory has to be developed further than will be done in this article; here I shall hardly proceed beyond showing the importance of power. For a more detailed and formal exposition of this theory, including theorems on decision-making, the reader is referred to Lieshout (1984) and Lieshout and De Vree (1985).

2. A system is defined as 'any set of elements that are interconnected in the sense that the conduct of any one of them is influenced by that of the others' (De Vree 1982: 19). The boundary of a social system is, therefore, the boundary of interconnected relations.

3. Accordingly, in this theory there is no place for the concept of 'erroneous opinion' (see e.g.: Aiken and Mott 1970: 196) as reputations for power exist only 'in the eye of the beholder'. The individual's opinion is by definition 'right', for it is the foundation of its behaviour.

4. Another topic of research in which positions are of prime importance is the study of interlocking business (or governmental) organizations, where the structure of persons holding memberships in more than one organization is studied. The relationship between interlocking positions and power is assumed in this strand of research, rather than investigated, as is of interest in the present research (see Figure 1). This relationship appears to be existant, but it is not clear to what extent interlocking positions give power to their occupants (this is discussed by Scott, in: Stokman, Ziegler and Scott, 1985: 2-6). Moreover, relevant positions are defined without regard to intra-organizational decision-making processes, which are the major focus of this essay. Finally, 'interlockingresearch' usually has a macro perspective, being used for whole nations (an exception being Laumann and Pappi (1976); their network approach, furthermore, is not solely based on a positional method), while in this article a micro perspective is used. See e.g.: Helmers et al. 1975; Mokken and Stokman 1976; Laumann and Pappi 1976; Laumann, Marsden and Galaskiewicz 1977; Stokman, Ziegler and Scott 1985.

5. I should like to emphasize here that, in the context of formal organizations,
these rights and possibilities to act need not be part of the formal rules of the organization. As is well known, around the nucleus of the formal rules of an organization, informal rules tend to develop. Informal rules too belong to the organization as it operates, and thus are relevant information concerning reputation for power.

6. Position is called an 'objective' power base, because it is the same for all observers, either other members of the social system or researchers. Reputation for power is a 'subjective' power base, depending as it does on each individual's proper experience and perception.

7. Dahl seems to forget the fourth possibility: unsuccessful attempts to veto alternatives initiated by others. These too ought to be tabulated as individual defeats.

8. By 'retrospective' research I mean research that is done after the decision-making process has taken place: 'synchronous' research is done while the decision-making process is under way.

9. Henceforth I shall only write 'interview', because in the reputational method interviews seem to be used more often than written questionnaires. But to my mind all that is said here about interviews applies equally to questionnaires.

10. Furthermore the demand of examinability ought to lead the researcher to some kind of identification of his informants in the account of his investigations, making their anonymity towards other members of the social system still more vulnerable.

11. Partly for this reason most elite interview projects are confined to general attitudes, etc. (See e.g.: Aberbach, Chesney and Rockman 1973).

12. Epistemologically, there is an even stronger reason for doubt - a point suggested by dr. Lieshout in a personal communication. If responding to questions in an interview is behaviour that can be explained in the light of a SEU-theory, then it should be explained by means of the variables indicated by this theory (see also: Dijkstra and Van der Zouwen 1977). Asking questions can then be a way to test such a theory. To test a theory of interviewing, that is, whereas I am concerned here with a theory of decision-making. To test a theory of decision-making, interviews are commonly applied to find out how things (i.e. perceptions) are, even though SEU-theories may explain both how they are, and what kind of answers will be given. Interviews are used in this case as a short-cut, to evade the long and tedious reasoning from the theory to behaviour and perceptions of individuals. As long as interviews and theoretical reasoning (prediction) lead to the same results, interviews are redundant. When the results differ, there is much reason not to trust the interviews, because of the low validity of the measurement theory of interviewing, as appears from the text.

13. Not excluded is of course the checking of data within one measurement method by different techniques.

References


D.F. Westerheijden  A critique of power measurement methods