Argumentative turn

Policy analysis, science and politics: from 'speaking truth to power' to 'making sense together'

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In an historical overview, this paper links to the paradox that the increasing scientification of politics leads to a politicisation of science. For a long time, scientists offered their capabilities as 'speaking truth to power'. Since the beginning of the 1990s, this input has been transformed into an argumentative policy analysis. This reinvigorates political prudence as 'making sense together'.

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CCORDING TO LASSWELL (1971), policy science is about the production and application of knowledge of and in policy. Policy-makers who desire to tackle problems on the political agenda successfully, should be able to mobilise the best available knowledge. This requires high-quality knowledge in policy. Policy-makers and, in a democracy, citizens, also need to know how policy processes really evolve. This demands precise knowledge of policy.

There is an obvious link between the two: the more and better the knowledge of policy, the easier it is to mobilise knowledge in policy. Lasswell expresses this interdependence by defining the policy scientist's operational task as eliciting the maximum rational judgement of all those involved in policymaking.

For the applied policy scientist or policy analyst this implies the development of two skills. First, for the sake of mobilising the best available knowledge in policy, he/she should be able to mediate between different scientific disciplines. Second, to optimise the interdependence between science in and of policy, she/he should be able to mediate between science and politics. Hence Dunn's (1994, page 84) formal definition of policy analysis as an applied social science discipline that uses multiple research methods in a context of argumentation, public debate [and political struggle] to create, evaluate critically, and communicate policy-relevant knowledge.

Historically, the differentiation and successful institutionalisation of policy science can be interpreted as the spread of the functions of knowledge Robert Hoppe studied sociology and political science at the Catholic University, Nijmegen. He held the chair of Political Science and Public Administration at the University of Amsterdam from 1986 to 1997. Currently he holds the chair for Policy Science at Twente University's Faculty for Public Administration and Public Policy.

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organisation, storage, dissemination and application in the knowledge system (Dunn and Holzner, 1988; van de Graaf and Hoppe, 1989, page 29). Moreover, this scientification of hitherto 'unscientised' functions, by including science of policy explicitly, aimed to gear them to the political system. In that sense, Lerner and Lasswell's (1951) call for policy sciences anticipated, and probably helped bring about, the scientification of politics.

Peter Weingart (1999) sees the development of the science-policy nexus as a dialectical process of the scientification of politics/policy and the politicisation of science. Numerous studies of political controversies indeed show that science advisors behave like any other self-interested actor (Nelkin, 1995). Yet science somehow managed to maintain its functional cognitive authority in politics. This may be because of its changing shape, which has been characterised as the emergence of a post-parliamentary and post-national network democracy (Andersen and Burns, 1996, pages 227–251).

National political developments are put in the background by ideas about uncontrollable, but apparently inevitable, international developments; in Europe, national state authority and power in public policy-making is leaking away to a new political and administrative élite, situated in the institutional ensemble of the European Union. National representation is in the hands of political parties which no longer control ideological debate. The authority and policy-making power of national governments is also leaking away towards increasingly powerful policy-issue networks, dominated by functional representation by interest groups and practical experts.

In this situation, public debate has become even more fragile than it was. It has become diluted by the predominance of purely pragmatic, managerial and administrative argument, and under-articulated as a result of an explosion of new political schemata that crowd out the more conventional ideologies. The new schemata do feed on the ideologies; but in larger part they consist of a random and unarticulated 'mish-mash' of attitudes and images derived from ethnic, local-cultural, professional, religious, social movement and personal political experiences.

The market-place of political ideas and arguments is thriving; but on the other hand, politicians and citizens are at a loss to judge its nature and quality.

Neither political parties, nor public officials, interest groups, nor social movements and citizen groups, nor even the public media show any inclination, let alone competency, in ordering this inchoate field. In such conditions, scientific debate provides a much needed minimal amount of order and articulation of concepts, arguments and ideas. Although frequently more in rhetoric than substance, reference to scientific 'validation' does provide politicians, public officials and citizens alike with some sort of compass in an ideological universe in disarray.

For policy analysis to have any political impact under such conditions, it should be able somehow to continue 'speaking truth' to political élites who are ideologically uprooted, but cling to power; to the élites of administrators, managers, professionals and experts who vie for power in the jungle of organisations populating the functional policy domains of post-parliamentary democracy; and to a broader audience of an ideologically disoriented and politically disenchanted citizenry.

Yet what does it mean to 'speak truth to power' in contemporary society and politics? To answer this question, first, I turn to some megatrends in epistemological debate. On that basis, second, I will delineate its implications for the development of policy analysis.

Epistemology

Once upon a time, social, political and administrative élites genuinely believed in scientific rationality as a key to solving collective problems. Like scientists themselves, they were inheritors of the 'Enlightenment', who pictured unfettered growth of scientific knowledge as the driving force of social progress and individual 'pursuit of happiness'.

However, after two World Wars, the Shoah (Nazi death camps) and the Gulag (Soviet death camps), the nuclear race, the ecological crisis, and the fall of 'scientific' communism, belief in scientific rationality is decaying. Science and scientists are, to a greater or lesser extent, accessories to human suffering and ecological degradation. For religious fundamentalists and modern neo-tribalists this suffices to reject science in a 'rage against reason'.

Even post-modernists reject claims to ground political and social ideas in scientific, rational and consistent argument as potentially exclusive, suppressive, technocratic and ultimately undemocratic. Instead, they celebrate 'otherness', incompatibilities and ruptures between lifestyles, cultures, discourses, pluralism, the decentred ego, and the uniqueness, contingency and fragmentation of all social phenomena.

Richard Bernstein (1991) has characterised this new intellectual force-field aptly as the polarity of a "both/and" situation: the modernist idea of the Enlightenment as 'unfinished project' and the

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post-modernist idea of it as 'historical error' are like opposites that can never be reconciled, yet are inextricably intertwined in that they mutually elicit and illuminate each other. Therefore, it is unnecessary to push matters to an extreme. I would rather cast the modernism—post-modernism divide as different accents within a markedly revised concept of scientific rationality.

First, the conviction that empirical—analytic scientific procedure alone may lay claim to scientific rationality has become untenable. In this (neo-)positivist conception, science is based on strictly neutral, objective, carefully controlled sense observation of physical and social facts. Long observation is supposed to uncover regularities and patterns, which, crafted into abstract hypotheses, are amenable to further rigorous testing. Hypotheses surviving these further tests, may be used in the formulation of deductive systems of lawlike propositions, in which they enter as the general premises in the covering-law model of explanation and prediction.

Habermas (1971) has shown that this idea corres-ponds to just one knowledge interest constitutive of science, that is, the domain of labour, work and human control over a physical or social environment. Yet humans know more action domains, and therefore knowledge interests. Interaction and mutual understanding of action motives and meanings is a second knowledge interest. It lends the interpretative and hermeneutic sciences their legitimate claim to scientific rationality.

Where meaningful interactions are suffocated by unconscious collective images or pre-understandings which deserve articulation, reflection and critique, there is a legitimate task for critical science. Empirical analysis of data, skilful interpretation of socially constructed meanings and social critique are equally important, vital elements of an enlarged concept of scientific rationality.

Second, it is now nearly universally acknowledged by scientists that scientific knowledge is fallible. The Cartesian 'either/or' position has been abandoned. Those who like to be considered 'scientifically rational' can no longer appeal to rocklike cognitive certainties or axioms (be they God, the Cogito, or sense observation). Modern rationality rests on acknowledging that "there is no belief or thesis — no matter how fundamental — that is not open to further

interpretation and criticism" (Bernstein, 1991, page 327).

Fallibility implies the expectation of being proven wrong, and therefore the willingness to revise one's insights. Rationality as openness to learning further presupposes the embeddedness of the scientist in a durable social context of dialogue and action. An action context, because only there the pragmatic alternation between thought and action exists which brings error to light. A context of critical dialogue, because this catalyses the learning process. It is not accidental, then, that Habermas, defender *par excellence* of the idea of the Enlightenment, has strongly argued that cognitive—analytic rationality is unthinkable without a rationality which, thus, needs to be social, interactive and dialogic. Yet what use is this to policy science and policy analysis?

Policy analysis

Democratic aspirations in early policy science

Policy science is usually traced back to Harold Lasswell's intellectual underpinning of the endeavour to gear the applied social sciences systematically and methodically to the needs of strategic public policy-making (Lasswell, 1951; 1971). In Lasswell's designs the relationship between policy science and the practice of politics was to be democratic and pragmatic. Policy science was not a technocratic strategy to substitute politics with enlightened administration; nor was it a social technology, always at the service of politicians and administrators.

For Lasswell, policy science was a vital element in a political strategy to maintain democracy and human dignity post-World War II. He follows in the footsteps of the pragmatists. In their view, politics is modelled after peer review in science: it is a dialogue between expert opinion and the opinions of a larger public, in a community united by the quest for answers to shared problems.

Politics is seen as probing and honest debate, and not as conflict management which succeeds by exploiting the ignorance and incomplete knowledge of citizens. In a sense, political and policy science's goal is not to replace 'ordinary' political prudence and common sense with cognitively superior scientific knowledge, but to reinvigorate and systematise them (van de Graaf and Hoppe, 1989, pages 61–63; Torgerson, 1995, pages 234, 238–239).

Aspirations and rationality

Reality usually disappoints high aspirations, but it is ironic that policy science's breakthrough was intimately connected to a half-hearted post-behavioural turn in political science. Political scientists' call to recapture relevance in the face of exaggerated methodological rigour, was translated into curriculum and research programme innovations focusing on the

study of the content, processes and impacts of public policy.

However, its purpose remained technocratic, replacing politicians' and citizens' 'ordinary and local knowledge' of policy-making with a new, scientifically validated type of applied, general knowledge. Better knowledge of causation, and know-how about the application of scientific logic in decision-making were the dominant claims on which the schools of public policy were erected in one after another American university, and later in many European countries.

Testimony to the dialectics between the scientification of politics and the politicisation of science, the successful institutionalisation of policy science in American academia was also a result of favourable labour market prospects fuelled by a rising demand for policy analysis in the Kennedy and Johnson administrations. In Europe, similar influences were at work, especially in countries with social-democratic governments.

From an epistemological point of view, when policy analysis was beginning, three cross-cutting and non-exclusive currents can be discerned: analycentrism; neo-positivism; and critical rationalism (Dryzek, 1993, pages 217–222).

Analycentric policy analysis claims cognitive superiority over practice on the basis of the scientific logic and consistency built into analytical techniques such as cost-effectiveness analysis, cost-benefit analysis, statistical decision theory, and planningprogramming-budgeting. The analycentric policy analyst relies on algorithms, filled with data and insights from secondary sources, either scientific or practical. His/her 'value-added' is merely to see to it that actual decision-making follows rigorous scientific canons of procedural rationality (Behn and Vaupel, 1982). Analycentric policy analysis has been effectively criticised for its lack of political realism, and, in spite of its alleged procedural neutrality, its introduction of politically biased assumptions in the guise of 'technicalities'.

Neo-positivist policy analysis grounds its claim to cognitive superiority in its knowledge of causal links. The attractiveness of a neo-positivist concept of science is that knowledge of scientific laws, in technical—instrumental fashion, may be applied to the explanation of the emergence of policy problems and the prediction of impacts of certain policy interventions. After all, if a policy is a plan for achieving particular objectives with the help of certain means, certified causal knowledge is indispensable. For objectives are consequences preferred by policy-makers; and means are their chosen and manipulated causes.

Although the grounding of policy analysis in causal knowledge lingers on, neo-positivist policy analysis has withered away. The above-mentioned criticism by Habermas certainly played a role here, but, applied to policy analysis, neo-positivism leads

to obvious self contradictions. If human behaviour generally is driven by laws governing the behaviour of ordinary people, why grant immunity from such laws to politicians and policy-makers (Bobrow and Dryzek, 1987, page 132)? Also, neo-positivists overlook that causal knowledge, through humanity's capacity for learning, may 'self destruct' the causal laws on which a policy is based.

Critical–rationalist policy analysis shares with neo-positivism its claim to superior causal knowledge. However, it strongly differs in how to acquire it in the real world. In this respect, critical–rational policy analysis means an enormous step towards a fallibilist and learning concept of rationality.

Building on Popper's (1974) "falsificationism" and his political philosophy of piecemeal social engineering, Campbell and Stanley (1963) have developed critical—rational policy analysis into a sophisticated methodology of quasi-experimental impact evaluation. In their view, knowledge acquisition and progress is an evolutionary process of learning from trial and error in successive efforts to compare hypotheses to experimentally generated impacts. This is true for both ordinary and scientific knowledge. Science is the more efficient learning strategy because of the stricter requirements for the conditions of learning and the interpretation of results.

Applied to policy-making, a policy's content is seen as hypothesis, and implementation is a social experiment. Braybrooke and Lindblom (1963) have observed such processes of serial policy adjustment in practice. However, unlike routine practice, in critical–rational policy analysis the controlled nature of the experiment is of prime importance. This means that policy analysts are responsible for keeping objectives and conditions for implementation stable during the process.

Afterwards, the impact of an intervention on the properties of an experimental group may be compared to that of a similarly composed control group. Any differences found may then be attributed to the policy intervention. Repeated experiments will lead gradually to better knowledge as a result of error elimination. Ideally, true to the ideals of an open society, not just the experimenting and evaluating policy analysts, but also those subjected to the experiment can offer their views and criticisms.

Critical—rational policy analysis has many strengths. By conceiving policy as hypothesis and implementation as experiment, it escapes from the neo-positivist illusion that delay of action may improve knowledge. The analogy between policy-making and experimenting better fits a political reality of permanent time pressure and action imperatives.

In addition, the doctrine of an open and experimenting society returns to pragmatist notions of the polity as a community of problem-solvers. In principle, therefore, critical—rational policy analysis escapes the technocratic tendencies inherent in analycentric and neo-positivist approaches.

Nevertheless, there are several catches. Some of the criticism focuses on the incremental or piecemeal nature of policy experiments and the slow progress of knowledge in implementing the critical—rational programme. It is argued that this does not fit a world of rapid change in which some policy experiments depend for their success on non-incremental increases in resources, and on enthusiasm rather than critique.

Another type of criticism addresses the gap between the doctrine of the open, experimenting society and the practice of quasi-experimental impact evaluation. Stringent top-down implementation in different sites is a prerequisite for controlled social experiments. In practice, this leads to a 'cosy relationship' among reform-minded politicians, administrators and the scientific policy evaluators, who jointly treat citizens like objects not entitled to any criticism during or after the experiment (Dryzek, 1993, page 220).

The most lethal criticism, however, concerns the analogy to scientific experiment underlying Popper's and Campbell and Stanley's views. In particular, Dunn (1993) has shown convincingly that the analogy runs into crippling objections if applied to social systems and policy problems. Even if reform-minded policy-makers and evaluators go to great lengths to arrange the experiments in such a way that results counter to their expectations and preferences may occur, the social dynamics of human symbol internalisation and externalisation (Berger and Luckman, 1967) or structuration (Giddens, 1979) imply that:

"... experimental [design and] outcomes are unavoidably mediated by diverse standards of appraisal which are unevenly distributed among stakeholders in policy reforms. ... Social theories, unlike physical ones, are difficult to falsify with experimental data because the interpretation of such data is mediated by the assumptions, frames of reference, and ideologies of social scientists and other stakeholders in reform" (Dunn, 1993, pages 259–260).

This poses no insurmountable problems in cases of well-structured, rather static, and nearly decomposable policy issues, but such issues decrease in frequency and urgency in contemporary politics. Therefore, it may be concluded, as a fallibilist and error-eliminating method, critical—rationalism is only

Critical-rationalism is only fit for avoiding first-order errors concerning the selection of the better of two or more causal hypotheses: it is of little help in avoiding second-order errors of picking the more adequate of two or more problem frames fit for avoiding first-order errors concerning the selection of the better of two or more causal hypotheses. It is of little significance and help in avoiding second-order errors of picking the more adequate of two or more problem frames.

Although some critical—rationalists have embraced methodological multiplism as a remedy, on balance, critical—rationalism relies on "qualitative, common-sense knowing of wholes and patterns..." (Campbell, 1982, pages 330–331) when it comes to selection of problem definition and theoretical frames. Campbell has conceded that, when the results of a policy experiment frequently remain open to conflicting and ambiguous interpretation, "an experiment is of itself no more than an argument" (Campbell, 1982, pages 330–331). Therefore, I conclude that critical—rational policy analysis is on the verge of an argumentative turn (see below).

Post-positivist turn in policy analysis

Somewhere around 1980, policy science's original wave of success subsided. Lindblom and Cohen's *Usable Knowledge* (1979) marks a period where policy scientists and analysts publicly doubt the 'value-added' for 'ordinary knowledge' of their 'professional social inquiry'. From the disappointments with analycentric, neo-positivist and critical–rational policy analysis, Carol Weiss (1991, page 321) draws the conclusion that the field is in intellectual crisis:

"That social scientists shape the world they study by the way they define the problem has come to be accepted not only by social scientists but by sophisticated political actors as well. They are aware that researchers' assumptions, theories, and choice of variables can have large effects on the answer they find. This new understanding throws into doubt the accommodation [with political and administrative practice] that earlier generations of social scientists had negotiated. If they no longer claim to find 'truth' about 'reality', what is their role in the policy process? The time seems to have arrived for a new set of assumptions and arrangements."

The new assumptions, not the new arrangements, have arrived in the shape of the post-positivist turn. This means that even policy analysts (in the social sciences a rearguard in leaving the positivist and pure critical—rationalist trenches) admit interpretative, hermeneutic and critical approaches to their stock of knowledge and methods. Within the post-positivist turn broadly perceived, four main currents may by discerned: relativistic; critical; forensic; and participatory policy analysis.

A relativistic policy analysis can be attributed to the 'early' Lindblom and Wildavsky. Lindblom'a empirically grounded insights in the disjointed

incrementalist practice of policy-making (Braybrooke and Lindblom, 1963) have always held Lindblom back from any enchantment with the idea of the attainment in practice of a more comprehensive rationality intimated by a Lasswellian policy science. As a 'science of muddling through', the most policy analysis could hope for was to provide policy practice with clever strategic shortcuts and simplifications. Yet, to escape from the dangers of over-simplification, one had to trust the practice of pluralist politics, its partisan mutual adjustment, and its trial-and-error learning in the successive limited comparisons of serial adjustments.

Lindblom's theory harbours strong fallibilist and pragmatist convictions. In *Usable Knowledge* (Lindblom and Cohen, 1979) he holds on to these vital insights. The impact of professional policy analysis is limited, and adds only modest increments to the ordinary knowledge of politicians and public officials. Policy analysts are condemned to provide argumentative ammunition for the rhetorical struggles of politicians (policy analysis as argument or data); only occasionally they discover a nugget of enlightenment (policy analysis as idea).

Wildavsky's views do not differ much from Lindblom's, but they are more optimistic about the "art and craft of policy analysis" (Wildavsky, 1979). After all, Wildavsky is the founding father of the University of California at Berkeley's policy analytic curriculum. Policy analysis Wildavskian style is depicted as a dialogic and prudential balancing act in which the policy analyst helps both politicians and citizens to find a practical middle ground between the ever- present tensions of resources and constraints, cogitation and interaction, and dogma and scepsis.

Like Lindblom (1977) in his widely acclaimed *Politics and Markets*, Wildavsky, at the beginning of the 80s, lost his trust in political pluralism as an error-correcting safety net for biased, incremental policies (Wildavsky, 1988, pages xv–xxi). Concerned about increasing ideological cleavages among the American political élite and their impotence to forge a new national consensus, he turned to group-grid cultural theory to grasp better their diverging political frames (Douglas and Wildavsky, 1982).

Until 1980, Lindblom and Wildavsky defended an interpretative—hermeneutic approach to policy analysis, in the sense that they, like anthropologists among the tribes of policy experts, have inquired into the policy practitioners' rules for problem definition, policy design, formulation and adoption, implementation, and evaluation. This method accounts for the widespread acceptance of their empirical findings.

Normatively speaking, however, their approach often meant unquestioned compliance with the rules of thumb and the supposed checks and balances of pluralist political practice. This is comparable to a hermeneutic approach to shared traditions and pre-understandings without any thought of the possibility of ideological, psychopathological or any other reprehensible bias or prejudice (Torgerson, 1995; but

see Lindblom, 1990; Lindblom and Woodhouse, 1993). Many have pointed out that such an uncritical interpretivist—hermeneutic approach to policy analysis can lead to a scientifically or morally objectionable relativism.

A critical-theoretical approach, advocated by Forester (1989), Dryzek (1990, and Bobrow and Dryzek (1987)) has attacked the relativist approach to policy analysis most. Their main accusation is that relativists disregard the conditions for consensus formation.

Forester blames Wildavsky for failing to differentiate between political interaction (as a problem-solving strategy in its own right, in addition to cogitation or analysis) which does and does not elicit true learning among citizens (Forester, 1985, page 265 ff). Forester deems this distinction essential in a political system where common sense and shared meaning can no longer be presupposed, and groups with clashing political frames of reference have an interest in maintaining public deception and bias.

Habermas' communicative ethics (Habermas, 1981), especially his thoughts on the ideal speech situation in which people communicate free from power relations, deception and self-deception, is used as a standard for judging to what extent policy-makers form a rational and genuine consensus. Policy analysts would have as their main task to monitor and foster means of authentic consensus formation.

To this end, Fox and Miller (1995, pages 118–120) have proposed criteria for legitimate contributions to public debate: sincerity; situation-regarding intentionality; willing attention; and unique and indis-pensable expertise. These criteria demonstrate that the critical policy analyst does not pursue public participation for its own sake. He/she advocates discursive pluralism with an eye to the quality of decision-making and the authenticity of consensus formation.

None the less, Fox and Miller admit that, in the virtual reality and image struggles of the media, it is difficult to judge to what extent political debate observes these four criteria. Forester (1989) has developed a typology of biased and distorted policy communication, and corresponding counter-strategies for restoring trust and authenticity. The implication is that policy analysts themselves ought to see to it that their own communicative and argumentative practices are in order. The art of listening, respectful treatment of target groups, avoidance of unnecessary 'officialese' and other expert discourse, and the craft of initiating and conducting mutually enlightening debate — such are the professional skills of the critical-cum-interpretative policy analyst.

Critical analysis is often criticised on two counts. Both regard the dangerous consequences of giving too much weight to the guiding ideal of the ideal speech situation. The first objection is that, however attractive from a theoretical perspective, these ideals are of limited validity in practice. Where is the borderline

between deception and misunderstanding? Who is to determine what is the 'better' argument? To what lengths should we go in debate and communication, where we also know that human rationality is bounded and fragile, and, sooner or later, we have to act?

In other words, in all collective decision-making we reach dead ends, or situations where a decision cannot be made, where debate, reasoning, and the force of the better argument are exhausted, and we have to shift to some form of collective will formation and legitimate power to bring the process to closure (Hoppe, 1983, pages 231–235; Bernstein, 1991, pages 221–222). All political systems are in need of procedures for managing conflicts unresolvable by debate and reasoned argument. The critical approach to policy analysis turns a blind eye to this problem.

A second objection is that critical analysis often gets stuck in a form of counter-expertise disinclined to serious mutual reflection and learning. In such cases, the critical policy analyst just provides rhetorical ammunition for political fights, and merely contributes to polarisation, zigzag policies and stalemate (Schön, 1983, pages 349–350). Torgerson (1995, page 245) holds that:

"critique turns against both the domain of common understandings and the restricted nature of technocratic reason. ... By... setting itself in judgement of common understandings, critique has an ironic potential to manifest itself as a mirror-image of technocracy."

In addition, a critical policy analyst, although a partisan of 'the people', easily overlooks or downplays divergent opinions among ordinary citizens.

For the forensic policy analyst this danger is non-existent (Dunn, 1993; Paris and Reynolds, 1983; Fischer, 1980; 1995; Schön, 1983; Schön and Rein, 1994). To him/her it is self evident that, as in postempiricist epistemology after Kuhn (1970) or the conditions for post-normal science specified by Funtowicz and Ravetz (1993), policy practice is flooded by different thinking styles, diverging interpretative frames, competing policy belief systems, various ideologies, alternative professional paradigms, different world views, contrasting images of man and nature, multiple perspectives, and so on. Such frames are clusters of interlocking causal and normative beliefs, whose functions are at once cognitive, communicative, and expressive of one's identity.

To infuse a polyvalent world with meaning, sense and purpose, and to make action and judgement possible at all, people need such frames as a sort of mental grappling hook. For instance, professional frames have been labelled the languages and cultures of "tribes of experts" (Dryzek, 1993, page 222) which create "contradictory certainties" (Schwarz and Thompson, 1990). What people 'see', deem 'relevant', and judge 'persuasive evidence' on the basis of

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such frames, may indeed render them almost beyond comparison or translation.

The forensic policy analyst considers that the task is to use the differences between frames to forge an innovative policy design from a combination of plausible and robust arguments ('frame-reflective analysis'), or to test and bolster some frames ('frame-critical analysis'). Ideally, following rules of hermeneutic policy evaluation for arriving at shared constructions with policy stakeholders (Guba and Lincoln, 1989), and acting on the precepts of reflective practitionership (Schön, 1983), analysts marry frame-reflection and frame-criticism in an optimal mix of hermeneutic and critical moments in policy analysis.

Forensic analysts do not impose unreflectively a particular professional or political frame on a problematic situation. Rather they consider the problem as unstructured to begin with. Structuring problems in a simultaneous process of reflection, action and political strife, is the challenge of good analysis (Hisschemöller and Hoppe, 1996). Schön (1983) and Schön and Rein (1994) depict the forensic approach to analysis as a continuous process of *bricolage* between the policy analyst/designer, the policy design, and its wider environment, in which the policy design ought eventually to function independently of the analyst/designer.

The process of analysis and design cannot be straightforward. Rather, the idea is to sustain creativity in one's response to empirical uncertainties and normative ambiguities in an ever-changing world. Neither goals nor means are fixed; they are constructed transactionally over and over again in intelligent deliberation and political argument, in a process of "naming and framing" (Schön, 1983) which may repeatedly unsettle and attack apparently dominant concepts and frames of meaning.

It is obvious that the forensic approach, especially one that successfully combines frame-analysis, frame-reflection, and frame-criticism, fully corresponds to the enlarged concept of rationality as learning. Yet the approach faces serious hazards.

First, although some authors go to considerable lengths to describe and prescribe rules of thumb, adequate skills, and examples of best practice (Schön, 1983; Schön and Rein, 1994; Hoppe and Grin, 1995; Grin *et al*, 1997), the forensic approach remains

under-codified. This means that replication and error detection and elimination are weak. Partially, this is because of the nature of hermeneutics and critical theory, which share scepticism, and sometimes downright rejection, of codifying rules and formulating anything beyond the most general precepts of an approach to analysis.

Second, the forensic approach, more than any other, is caught in a tension between the demands of good analysis and the daily practice of politics and public administration. The critical-rationalist and the relativist policy analyst uncritically adjust to common practice in the role of trusted adviser of the politico—administrative élite; and even the critical analyst easily slips into the role of a counter-expert. It is far more difficult to carve out an acceptable niche for a forensic analyst as 'counsellor' or 'participatory expert'. Much more thought ought to be given to the institutional aspects of forensic policy analysis (see George, 1980).\(^1\)

Participatory policy analysis current in postpositivist analysis should also be distinguished. Theoretically, this current is heterogeneous, in that participatory analysts appeal to relativist, critical, and forensic concepts and themes. What unites their paradigm, is a principled selection of a range of participatory analytic techniques, in which citizens as citizens play important roles (Mayer, 1997).

Primarily those inspired by critical theory insist on the intrinsic merit of direct citizen participation in political decision-making. They justify participatory analysis by claiming that it contributes vitally to participatory democracy as the only rational form of life for policy scientists and true democrats (Torgerson, 1986; Dryzek, 1990). These analysts systematically favour participatory techniques in which a panel of citizens is at the heart of the analytic process, like methods for conducting consensus conferences or planning cells. The policy analyst's role is to serve and bolster citizens' policy recommendations (Hoppe and Grin, 1995, pages 101–102).

Relativist, critical and forensic analysts value participatory analysis for instrumental and contextual reasons. They specify three situations in which the use of participatory techniques is indispensable

when a policy problem addresses citizens' actions up-front, and finding an acceptable solution depends on appealing to and mobilising citizens' knowledge of local or regional conditions;

when policy issues have a strong ethical component (when experts have no privileged knowledge to bring to bear on the problem), or directly pertain to citizens' needs and wants;

when experts are strongly divided over an issue.

Those who view participatory analysis more as an instrument than a goal *per se* will prefer participatory techniques which produce structured debate between citizens, politicians, officials, interest group

Policy science and analysis still face the dilemma between serving either participatory democracy and active citizenship, or an allegedly enlightened political and policy-making élite of the administrative state

representatives and experts, such as scenario workshops and propositions debates. Here the analyst remains in control of the analytical process; citizens' participation, in certain situations and under particular conditions, vitally contributes to the information base, and to validity or representativeness of the analyst's interpretation of public debate and his/her recommendations.

The advantages of participatory analysis are obvious. In the three conditions mentioned, citizens' input to analysis is equally important, or even more important than the experts'. Methods of participatory analysis are excellent means of harnessing citizens' ordinary knowledge to analytical purposes. Participatory methods are hardly disputed as an expansion of the tool kits of relativist, critical and forensic policy analysis. The most important criticism is that it is not certain that citizen participation actually improves and enriches the quality of policy debate. Formal evaluations document that citizens rate the quality of participatory debates systematically higher than policy-makers and experts (Mayer, 1997, pages 138–140). In the absence of objective measurement and evaluation grounded in argumentation theory, it is difficult to judge to what extent such ratings are based on self-interested prejudice by policy-makers and experts.

More fundamental criticism remains focused on the aspirations for participatory democracy. In spite of the impressive possibilities of interactive use of contemporary information and communications technology, the practical objections to participatory dem-ocracy are likely to stay. The results of participatory analytical exercises, even when the size of citizen panels runs to hundreds or thousands (as in some recent applications), will never be able to claim the same representativeness as elections, referenda, or even large-scale opinion surveys.

In that sense, policy science and analysis still face the dilemma between serving either participatory democracy and active citizenship, or an allegedly enlightened political and policy-making élite of the administrative state. A dilemma which is as urgent as ever, now that the political means for 'making sense together' look very fragile in the face of the erosion of public debate and the fragmentation, incommensurabilities, ruptures and confusions between value systems and world views.

Future of policy analysis

Given the positivist beginnings and the post-positivist turn, what will the future of policy analysis look like? I would place my bets on an argumentative turn, the contours of which have been delineated already (Fischer and Forester, 1993), within post-positivist constraints. This would ban relativism, and simultaneously elaborate the usable elements of critical-rationalist, critical, forensic and participatory policy analysis in a new tool kit for policy advice.

An argumentative turn in policy analysis methodology would affect the practice of policy advice substantially. Argumentative policy analysis entails a looser coupling, sometimes even a decoupling, of policy analysis from its traditional context of decision support for government-initiated public policy programmes. In argumentative policy analysis, it is no longer government decisions, but public argument and debate that claim centre stage. These two mechanisms are either an established context gratefully used, or, in cases of as yet under-developed public fora, a context to be created by good forensic and participatory analysis (Hoppe and Peterse, 1993; 1998). Like market inspectors who judge the fairness of market conditions and issue measures to restore them, argumentative policy analysts would sometimes claim the role of 'inspector' of the fairness of the market-place for ideas, and assume democratic-pedagogical functions (Fischer and Forester, 1993, pages 6–7) — they would, literally, make democratic (capital-D) Deliberation (small-d) happen.

After bringing public debate to a timely but always temporary closure, the argumentative analyst would, of course, draw conclusions for issues where a genuine consensus for further policy design and implementation has been created. Yet also when consensus is still lacking, and even when dissent has sharpened, the argumentative policy analyst does not stand empty-handed. In the former case, she/he may advise governments and other stakeholders on how to elaborate jointly a strategy for partisan and serial adjustments that increases the likelihood of greater consensus at a later stage. In the latter case, he/she may detect, in the chaos of discord and confusion, those rare opportunities which may still exist for joint inquiry and continued dialogue (Roe, 1994; van Eeten, 1999), in the hope that opportunities for consensus formation are kept open, and in the certainty that continuation of dialogue in spite of discord is rational for sustaining the delicate fabric of the body politic (Diesing, 1962).

In sum, argumentative policy analysis is, first, epistemologically grounded in a fallibilist-dialogical concept of scientific rationality, and a socialconstructivist perspective on social reality. Second, it is based on a selection in context (Bobrow and Dryzek, 1987) of the most usable parts of the critical–rationalist, critical, forensic and participatory traditions. Third, it does not advocate a sudden and

complete paradigm shift, but a patient and persistent process of revamping and testing a new tool kit for professional policy analysis. In this way, 'speaking truth to power' may be transformed into an argumentative policy analysis which re-invigorates political prudence as 'making sense together'.

Note

1. This is why, above, I argued that the new post-positivist epistemological assumptions may be considered in place, but the new institutional arrangements for developing and implementing them in practice have not yet arrived.

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