Is Administrative Capacity a Useful Concept? Review of the Application, Meaning and Observation of Administrative Capacity in Political Science Literature

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ABSTRACT This paper surveys literature that invokes the concept of administrative capacity. The aim of the review was to discover how administrative capacity has been used, defined and operationalized and to determine whether and with which considerations administrative capacity is a useful concept for further research. The review finds that whilst the concept has appeared intermittently over time, it is not established at the centre of any research field. The concept serves different purposes; cross-references among different sub-disciplines are rare; and specific definitions, labels and means of observing it vary. But despite this variation, the core conception of capacity as an intrinsic ability or trait of an organisation or system has proved remarkably stable over time. Its regular appearance in diverse literature suggests that authors are intuiting the existence of a phenomenon that, though unseen, explains outcomes better than observable objects, agents or processes. The concept has proved useful in enabling comparison of unlike administrative entities and in serving as a proxy for performance in order to isolate the effects of public administration from other societal actors. But decisions about how it is defined and operationalized must be made carefully to avoid the risk of committing the fallacy of 'best practice' thinking or performing tautological analysis.

Introduction

The administrative capacity of the state has emerged intermittently as an important concept in a range of political science literature. The various conceptions, though disconnected and asynchronous, share a discernable core meaning, which might be denoted the abilities the public bureaucracy does or should possess. But despite its reoccurrence, administrative capacity is not established at the centre of any research field. Cross-references between sub-disciplines are very rare, and definitions, labels and means of detecting or observing it vary. In light of the term's uncertain conceptual status, the aim of this paper is to establish whether administrative capacity is a useful concept for empirical analysis and, if so, with what meaning and delimitations. To do so, it first traces the application of administrative capacity in the literature of different sub-disciplines, in particular in research on political and economic development and state building, international development, public administration and policy implementation, public choice, public management, policy change and governance. It then analyses how administrative capacity has been defined as well as observed. It concludes by suggesting why and with which considerations administrative capacity is a useful concept for further research.

¹ 'Bureaucratic capacity' and 'public sector capacity' appear often as synonyms for administrative capacity. Related concepts are 'state capacity', 'government capacity', 'institutional capacity', 'executive capacity' and 'organisational capacity'. In earlier literature 'capability' is used interchangeably with 'capacity'.

Applications of the Concept of Capacity

Determinant or equivalent of political development and state building

Early references to capacity as a core concept appear in the structural-functionalist literature on political development (see Almond 1965; Diamant 1971; Eisenstadt 1963; Jaguaribe 1973). Here capacity is conceived in two senses: as a core intrinsic trait of a political system to respond to or 'absorb' new demands arising from its social and international environments, which must be present for political development to occur (Eisenstadt 1963), and as the new, articulated functions taken on by the political system over time to respond to a new range of problems (Almond 1965). In these conceptions, capacity as a trait, or as differentiated functions, changes or increases in response to societal interests expressed as demands, with the political system arbitrating neutrally in the process of converting demands into outputs.

Capacity appears as a core concept also in the later state-centred analyses of state building that emerged in the mid-1980s. Unlike earlier Marxist, functionalist and liberal theories of the state, these accounts are grounded in the premise that "the state (its structure, capacity, and strength vis-à-vis civil society) cannot be reduced to a reflection of class forces" (Evans and Stephens 1988: 722). The state is considered able to act autonomously in line with its own interests, and its autonomy is thought to derive principally from its capacity. Mann (1984) argues that the autonomous power of the state is comprised of two forms: despotic and infrastructural. Despotic power is the range of actions that the state can take without routine, institutionalised negotiation with civil society groups, and infrastructural power is "the capacity of the state to actually penetrate society, and to implement logistically political decisions throughout the realm" (Mann 1984: 189). Mann contends that the autonomous power of modern, industrial states derives from the combination of strong infrastructural power, which is vested in the bureaucracy, and weak despotic power. The ability of state leaders to use this infrastructural power to realise their vision distinguishes successful states, according to Migdal (1988). Migdal defines this ability as state capability, which includes "the capacities to penetrate society, regulate social relationships, extract resources and appropriate or use resources in determined ways" (1988: 4). Weiss and Hobson (1995) argue that the kind of state capacity necessary for strong economic performance changes historically and specify the nature of the infrastructural capacity that differentiates performance of industrial states in recent times. Besides penetrative-extractive capacity, the authors stress the importance of coordinating society's resources and mobilising elite collaboration in pursuit of developmental goals. Strong coordinating capacity resides in particular bureaucratic arrangements and their collaborative linkages with dominant organisations of civil society, a kind of capacity observed in the economically successful East Asian countries. Thus, in statecentred analyses of political and economic development, state capacity, and more specifically bureaucratic capacity, is seen as both a source of the autonomy of the state as well as a determinant of development. As for what determines the extent of state capacity, analysts in this tradition refer to state elites' motivation to build efficient state apparatuses in preparation for war (Tilly 1990: 75) or, more generally, to historically/geo-politically formed elite orientations (Weiss 1998: 44).

Geddes (1994) contests the claim that the state has unitary preferences and seeks to explain why it exhibits different preferences and capacities. She analyses the politics of building bureaucratic capacity, explaining formal administrative reforms and their implementation with reference to institutional features of the regime and other characteristics of the political system that produce incentives shaping the choices of political elites. Heredia and Schneider (2003) also focus on the politics of administrative reform and put administrative capacity at the centre of their analysis. Conceptually they distinguish between market-oriented and capacity-enhancing reforms. Market-oriented reforms reduce and redefine core state functions and are unconcerned with building capacity. Capacity-enhancing reforms aim to enhance the quality and breadth of public goods provision. Improvements in capacity follow not from the initiation but from the institutionalisation of reforms, and institutionalisation depends on changed incentives. The likelihood of institutionalisation is posited to differ according to the type of reform, each of which shifts power in different ways. Formal administrative reforms may therefore be understood from these accounts to be an intervening variable between institutionally shaped elite preferences and administrative capacity. And with their focus on the institutional or interest-based obstacles to shifting power towards bureaucrats, these accounts imply the unlikelihood of meaningful growth in bureaucratic capacity over time.

The East Asian cases of economic success motivated the search for more fine-tuned explanations of the evolution of the particular kind of administrative capacity observed in the "developmental state" (Johnson 1982). Doner et al. (2005) argue that three interactive structural conditions—a) the need to deliver side payments to restive popular sectors necessary to maintain broad political coalitions, b) the need for foreign exchange and war matériel due to severe geopolitical security threats, and c) the scarcity of resource endowments—create the incentive for ruling elites to build the kind of institutional capacity able to improve overall living standards and leverage long-term growth. This account answers the conundrum that bureaucratic capacity has been observed to increase despite the pessimistic implications of public choice accounts. The analysis, however, applies to a particular institutional configuration within a specific regional context under very constrained conditions and is not easily applied elsewhere.

In the state building literature focussed on the United States, state building is usually equated with the development of new administrative institutions (Skowronek 1982: 14). Skowronek equates the building of the modern American state in the late 19th and early 20th centuries with the reconstruction of the state around expanded national administrative capacities. This account sees the building of administrative capacities to be contingent on political struggles that are defined and mediated by the institutional arrangements of the preestablished state. Studying the same historical period, Carpenter (2001) stresses the importance of this emergent administrative capacity to the ability of some bureaucratic agencies to act independently of politicians and implement their own programme preferences, thereby forging over time bureaucratic autonomy. In this view, increased capacity is a consequence of the interaction of organisational factors within the bureaucracy, such as strong middle management structures, merit recruitment and career systems, and the establishment of networks with societal organisations.

Administrative capacity is a central concern also of international development literature, which approaches state building from a prescriptive perspective. Development practitioners have sought to strengthen administrative capacity since the beginning of development cooperation in the 1950s (Morgan 1993),² but since the prescription and introduction of reforms to reduce the role and size of the state in the 1980s and early 1990s and the subsequent awareness of the importance of capable state institutions to well-functioning markets and stable democracies, scholars have intensified their effort to identify the locus, nature and scope of administrative capacity and prescribe the best means of improving it (see Grindle 1997; Cohen 1995; Hilderbrand and Grindle 1997; Tendler 1997).³

A similar focus on capacity identification and strengthening can be found in the EU enlargement literature. This literature is primarily concerned with identifying the capacity of the executives of CEE former and current candidate countries for EU accession, especially capacity for implementing the *acquis communautaire*, and the evolution of the EU's approach to assisting the building of that capacity (Dimitrov et al. 2006: 251). The concept of administrative capacity is widely used and often not defined, suggesting its meaning in this literature may be obvious and widely understood. For example, some Europeanization studies focussing on adaptation processes in CEE put executive capacity at the centre of their analysis without explicitly defining it (e.g. Goetz 2001; Goetz and Wollmann 2001). The European Commission has used different definitions, but they can be amalgamated as "administrative structures and systems, human resources and management skills necessary for the adoption and implementation of the *acquis communautaire*". For the work of capacity building, such a definition is problematic without specific threshold criteria; and the inability of the Commission to operationalise administrative capacity has been well documented in the literature (Dimitrova 2002; Grabbe 2003).

In sum, in the theoretical and empirical literature on state building and political and economic development, state capacity and in particular administrative capacity have been invoked as central factors. Capacity has been equated with state development as well as used to explain the emergence of state autonomy, whether as a neutral arbiter of societal demands or the instrument through which the preferences of state actors, constrained by institutional factors or structural conditions, are expressed. The scholars of the active building of capacity have been concerned with defining and observing its locus, nature and scope. Administrative capacity has also been credited with being the bedrock upon which bureaucratic autonomy in relation to political principals is forged.

Intervening factor in policy implementation

Administrative capacity is found as a core concept in the public administration literature concerned with capacity building. In public administration scholarship, capacity building is considered a tool of policy implementation, through which the capacity of

² The modes of practice have been labelled institution building, institutional strengthening, development management and institutional development (Morgan 1993), but despite nuances all are essentially capacity building. For a review of mainly the practitioner literature, see Moore (1995).

³ Most economists, political economists and sociologists investigating what makes a government capable use other concepts as their explanans and explananda, not capacity, and thus are not covered here.

⁴ This amalgamation is of three definitions cited in Dimitrova (2002: 171,179).

bureaucratic intermediaries to carry out requisite actions and to cooperate in the implementation of policy is enhanced, thereby facilitating implementation (May 2003). In studies of intergovernmental management, capacity building is seen as a core instrument to strengthen the capabilities of officials of different, usually lower, jurisdictions to manage programmes on their own and to fulfil newly assigned responsibilities (Radin 2003). Scholars concerned principally with capacity building are nevertheless challenged with the need to define capacity to clarify what ought to be built or strengthened or to be observed to change over time.

The increased occurrence of administrative capacity as a concept in the public administration literature coincides with the expansion of efforts to build capacity in the United States. One of the earliest studies to suggest research on capacity is the 1954 Commission on Intergovernmental Relation's The Capacity of the States (Milligan 1954). In 1960 Graham (1960) encouraged scholars to investigate how capacity to govern can be measured. In the 1970s and 1980s academic interest intensified as political reforms devolved and decentralised responsibilities from federal to state and local governments. An interagency committee formed by the U.S. Office of Management and Budget in 1974 sought to specify the nature of both executive and legislative local government capacity.⁵ It defined capacity as the abilities of public officials to perform what the committee judged were essential management functions (Burgess 1975). Other scholars concurred with the equation of capacity with management functions (see Honadle 1981), however no consensus on which functions to privilege emerged. Gargan (1981) objected to functionalist definitions on the grounds that they only reflect the interests of the observer. Bowman and Kearney (1988: 346) concurred that consensus is unlikely, but for reasons of analytic comparison chose a functionalist definition of U.S. state government capacity, namely "the ability to respond effectively to change, make decisions efficiently, effectively and responsively, and manage conflict". Whilst this literature seeks to define capacity to aid capacity building, and thus treats it as a dependent variable, capacity building as a "procedural policy instrument" (Howlett 2000) functions as an intervening variable in the process from policy decision to policy outcome.

Administrative capacity is also treated as a core variable in the analytical literature on policy implementation, which may be defined as a dynamic process comprised of a range of political and administrative behaviours directed towards putting a policy in place (Goggin et al. 1990). Administrative capacity is considered to shape significantly policy implementation processes and, in early implementation literature, tended to be viewed as a source of veto points and thus an obstacle to positive policy outcomes (Pressman and Wildavsky 1973; O'Toole and Montjoy 1984). Goggin et al. model capacity—"an institution's ability to take purposeful action" (1990: 38)—as an intervening variable between political incentives and policy outcomes. Accepting that capacity is a function of a gamut of features of administration, practically impossible to describe in their entirety, the authors empirically search for the components of capacity most likely to affect outcomes, alighting upon the structure, personnel and financial characteristics of agencies. More recent implementation literature highlighting the importance of capacity concerns intergovernmental policy

⁵ See Special Issue of *Public Administration Review* 35(6), 1975.

⁶ See Honadle (1981) for a review of this early literature.

implementation in the EU. Falkner et al. (2004) find that member state administrative shortcomings caused by insufficient financial and personnel resources explain non-compliance with EU law better than the extent of earlier political opposition during the policy design process. Hille and Knill (2006: 533) find that bureaucratic capacity is more important than the nature of the political system in explaining the extent of domestic implementation of EU requirements in the candidate countries prior to accession. Thus, where the prescriptive literature on capacity building has in effect treated capacity as a dependent variable and struggled to agree on what administrative capacity actually is, the analytical literature on implementation treats capacity as an intervening variable and investigates empirically which aspects of administration are most significant in explaining implementation outcomes.⁷

Administrative capacity has also entered as an intervening factor in the public choice literature on policy delegation. This literature for many years treated the bureaucracy as a rational unitary agent in order to isolate key aspects of the politician—bureaucrat relationship that affect politicians' ability to control and direct bureaucracies (Ingraham and Kneedler 2000). In doing so, variable capabilities of bureaucracies played no role in the theories; rather, the theories assumed a high level of bureaucrat expertise (Huber and McCarty 2004). Recent theoretical models introduce low bureaucratic capacity—characterised as poor individual knowledge and skills, breakdown of hierarchies in the organisational structure, incentives for corruption and lack of basic implementation resources (Ibid.: 481)—as a central factor and demonstrate that in low capacity contexts, many of the predictions of the earlier delegation literature no longer obtain (Huber and McCarty 2001, 2004, 2006). These recent models suggest that low bureaucratic capacity creates a disincentive for enhancing legislative capacity (Id. 2001); diminishes the ability of politicians to exercise control (Id. 2004); increases the amount of discretion delegated (Id. 2006); and diminishes the incentive for policy reform (Id. 2004, 2006). Thus, this literature shows theoretically that by interfering in politicians' means of ensuring the implementation of their policy preferences, low bureaucratic capacity affects, ultimately, the compatibility of democracy and bureaucracy (Id. 2006).

In sum, in the prescriptive, theoretical and empirical public administration literature on policy implementation and in the theoretical literature on policy delegation administrative capacity has appeared as a significant intervening factor in the process from policy decision to policy outcome. This literature has shown how low administrative capacity has implications for the impact of policy, the quality of multi-level governance, the fulfilment of international obligations and the accountability of the political system.

Antecedent of performance

The literature on public management puts a spotlight on the human element in policy implementation processes, seeking to illuminate the extent to which management, as an operational element of bureaucracy, influences implementation and outcomes of policy.

⁷ Closely related to policy implementation studies, the literature on the implementation of international agreements also identifies state or administrative capacity as a factor explaining extent of compliance (e.g. Chayes and Chayes 1993; Haas et al. 1993; Keohane and Levy 1996; Victor et al. 1998). According to VanDeveer and Dabelko (2001: 18) "[t]his research generally treats state capacity as an intervening variable or a background condition in explanations of the effects…of international institutions such as law, regimes and assistance programs".

Public management, defined as "the set of conscious efforts to concert actors and resources to carry out established collective purposes" (O'Toole Jr. 2000: 21), may be distinguished from public administration due to its emphasis on leadership, key transactions and individual skills and abilities, moving away from the more traditional focus on the institutions of administration. Though public management studies were initially predominantly normative and this approach persists to the present, scholarship since the late 1990s has focussed on empirically investigating what constitutes management and how management interacts with rules, structure, resources and context to influence public outputs and outcomes.

An aggregative concept like capacity may provide particular leverage for this research field, which focuses on dynamic phenomena driven by human capabilities and interactions and the interplay of human behaviour with institutions, structures and resources. Indeed, some management scholars have recently invoked and elaborated the concept of capacity. Ingraham and Donahue, in reporting the framework of a large multi-year project to define and map public management in U.S. city and state governments and federal agencies, introduce the concept of management capacity to represent the administration's "intrinsic ability to marshal, develop, direct, and control its human, physical, and information capital to support the discharge of its policy directions" (Ingraham and Donahue 2000: 294). The authors distinguish between core administrative functions, said to be generic for all bureaucracies, and policy implementation functions. Administrative functions support all other policy-specific managerial work of government related to delivery. Management capacity emerges from the dynamic operation of the management systems related to core administration, namely systems to manage money, staff, infrastructure and IT, factors that integrate operations (leadership, systems to support information flow) and systems that support organisational learning (i.e. results-based management systems). That is, management capacity is created by the configuration and the dynamic operation of the systems and factors. A methodological challenge for this and similar projects is to justify the selection of these elements, as well as the criteria to rate the units of analysis. In empirical tests of the choices, subsequent studies have found a positive correlation between the management capacity scores and performance (e.g. Donahue et al. 2000; Coggburn and Schneider 2003; Hou et al. 2003). Further studies have investigated what explains managerial capacity, finding a relationship with some measures of social capital for U.S. states (Knack 2002) and cities (Pierce et al. 2002), although other studies dispute the link (Tavits 2006).

Public management studies also have a 'capacity building' perspective represented by competency management. The term competency denotes "the skills and capabilities that the state machine does or should possess, as well as its legal powers" (Lodge and Hood 2003: 131). Clearly, the concepts of competency and capacity overlap. Lodge and Hood (Ibid.) trace the meaning and use of competency back to the 1970s. With roots in business management studies, the concept has been used to refer to the ability of organisations to carry out particular operations or to the ability of individuals to perform specific tasks. The literature on organisations stresses identifying core competences central to the organisation's strategic position, whilst the literature on human skills either identifies behavioural attributes

⁸ The Government Performance Project and Federal Performance Project (GPP) (http://sites.maxwell.syr.edu/ gpp3/index-2.html). A similar index of management capacity exists for Germany cities, produced by the German Association of Cities (Tavits 2002).

associated with superior performance or specifies the level of performance judged to indicate good practice (Ibid.: 134 note 13). As with capacity building practice in international development and intergovernmental management, the application of the concept of competency in the public sector is not a trivial issue. Competency management has had very real implications for some bureaucrats in terms of job security, and some case studies show that it not only has not worked, but could, by highlighting incomplete or outdated competences, be generating system failures (Ibid.).

In sum, the literature on public management, in focussing on the human element in the policy implementation process, invokes the concept of capacity in two different ways. One approach seeks to inform practice by identifying the organisational or individual skills and capabilities the bureaucracy needs to meet contemporary challenges. Another approach invokes capacity to capture the intrinsic ability or potential of the bureaucracy to perform, a phenomenon that emerges from the existence of structures as well as their dynamic operation.

Product of governance

Capacity is frequently invoked in the literature on governance. This is not the place to discuss the many applications of the concept of governance, just to point out that discussions of public sector governance are suffused with references to capacity. For example, the debate on the 'hollow crown' is concerned with the argument that the centre of government "has been 'hollowed out' by a range of factors that limit its capacity" to achieve policy coherence and steer implementation (Weller and Bakvis 1997; see also Rhodes 1994). The coordination capacity of the executive is defined as its capacity to impose its will on the rest (Saward 1997). Dimitrov et al. (2006) argue that CEE governments after the fall of communism were extreme examples of the hollow crown thesis. Empirically the authors trace the developments since 1989 to build coordination capacity in CEE core executives. The authors infer that greater or lesser coordination capacity emerges from the configurations of eight institutional aspects and validate their inference by relating the configurations to indicators of performance.

How do the concepts of governance and capacity relate? Governance has been defined generally as "the setting, application, and enforcement of rules" (Kjaer 2004: 189) as well as "the means for achieving direction, control, and coordination of wholly or partially autonomous individuals or organizations on behalf of interests to which they jointly contribute" (Lynn et al. 2000: 235). Thus, it is conceived as both what is done as well as the means of doing it. As for capacity, it is predominantly portrayed across sub-fields as a trait or latent attribute of an entity or system (see Section II.B). Hence, capacity, in relation to governance, is the ability to govern. It is largely determined by particular means or arrangements of governance. Governance arrangements, and thus the capacities they enable, exist at various levels within different policy domains, jurisdictions, organisations or activities and are influenced by the wider social, economic and political context (Ibid.: 237).

Capacity is not, however, the usual unit of analysis in governance literature. Empirical analysis focuses on the regimes of laws, administrative structures and rules, judicial rulings and other practices that "constrain, prescribe, and enable government...production and delivery of publicly supported goods and services" (Ibid.: 235). But adopting a governance

perspective implies not viewing these elements in isolation. The governance approach was adopted in different sub-disciplines as a reaction to perceived fallacies or limitations of other existing explanatory approaches (Kjaer 2004: 150). Governance enabled insights that escape from old dichotomies, widened the scope of variables to be considered and addressed a particular weakness of institutional analysis by combining rule structures with agency to better explain change (Ibid.: 10). Hence, the approach constitutes the view that the collective effort of the elements of governance regimes are non-additive (Lynn et al.: 235 note 2). For example, to explain the performance of networks, the literature on interorganisational networks analyses how the entire network cooperates to achieve common objectives (Provan and Milward 1995). Within this perspective, an aggregative concept such as capacity has utility, which might explain why it is so frequently invoked. By viewing a system holistically and dynamically, governance theory sharpens the focus on performance. And capacity is a conceptual unit that links governance arrangements to performance.

In sum, the notion of capacity appears often in governance studies, but is not the usual unit of analysis. It does, though, conceptually represent the non-additive product of the dynamic operation of various elements of governance systems and link governance arrangements to performance. The focus of the governance approach on performance may bring the discussion of capacity to the fore.

Shaper of public policy

Finally, administrative capacity has been invoked in explanations of policy change. Heclo (1974) observed that new policy content comes from government administrators and other expert elites who interact over time in the shaping and implementation of policy. The increase of administrative power in the policy process is linked to the "capacity to draw upon administrative resources of information, analysis, and expertise for new policy lessons and appropriate conclusions on increasingly complex issues" (Ibid.: 305-6). Skocpol and Finegold (1982) explain the different fates of two similar New Deal policies in terms of historically determined differences in the administrative capacity to implement interventionist policies. Skocpol's (1992) 'structured polity' perspective places bureaucratic capacity at the centre of explanations of policy change. In this perspective, the extent of organisational capacities at any given time influences the kind of policy contributions officials make as well as the characteristics and demands of social groups. Meier (1994) includes bureaucratic capacity in his model of policy change, showing empirically how the capacities and interests of bureaucracies influence the kind of policies adopted. And Carpenter's (2001) account explains the conditions under which politicians might be induced to defer to bureaucrats' policy preferences. In sum, several influential accounts of why policies become institutionalised or change over time find administrative capacity to be a central explanatory variable. Capacity has therefore been shown to have effects in the reverse direction of the policy-performance process.

Definitions

Though originating in a variety of literature and invoked for different purposes, the conceptions of capacity reviewed here share a common core. Capacity is, in general terms, the abilities that the public bureaucracy does or should possess. With very few exceptions, authors define capacity as an intrinsic trait or attribute of all or part of the government's administrative machinery. Ingraham and Donahue (2000: 294) illustrate its nature using an analogy from physics: capacity is akin to potential energy, or the power an entity has in reserve resulting from the arrangement of its components, as distinct from its kinetic energy, or the power it exerts when actively functioning. It is viewed as a latent concept, and it precedes bureaucratic performance.

Also with few exceptions (e.g. Lodge and Hood 2003), most authors delimit the range of conceivable intrinsic abilities by specifying particular ideal functions that the bureaucracy is to perform. The functions chosen either reflect attempts to encompass fully all expected action, e.g. "the ability of the permanent machinery of government to implement policies, deliver services and provide policy advice to decision-makers" (Polidano 2000: 805) or reveal beliefs about which vanguard actions indicate or will leverage a highly capable administration, e.g. the "ability to respond effectively to change, make decisions efficiently, effectively, and responsively; and manage conflict" (Bowman and Kearney 1988: 346). Some authors elaborate only function-specific capacities, e.g. management capacity (Ingraham and Donahue 2000) or capacity for economic development (Weiss and Hobson 1995; Doner et al. 2005). The function most frequently specified is the ability to implement policy.

Some authors explicitly qualify the manner of action, that is, they set benchmarks of performance under which logically capacity does not obtain. For example, Carpenter defines capacity as "the collective talent of bureaucracies to perform with competence and without corruption and malfeasance" (2001: 47). Such definitions imply that capacity either is a dichotomous variable or admits of grading only over the performance threshold.

The few scholars who do not define capacity as an intrinsic trait refer directly to the manifest structures, matériel or staff (in short, 'structures') of the bureaucracy and thus treat capacity not as a theoretical but as a descriptive concept. For Skowronek (1982) administrative capacities are three dimensions that bound a state's mode of operations, namely organisational structure, the procedural routines that tie institutions together and the intellectual talents of the staff. The European Commission's definitional focus on structures, management skills and staff reflects similar priorities. Bowman and Kearney (1988) select 32 institutional features that prior reforms targeted to improve decision making, conflict management and responsiveness to change and use factor analysis to deduce four structural dimensions of executive capacity to perform these functions, namely staffing and spending, centralisation of authority, power of the chief executive and coordination mechanisms. These conceptions of capacity as structures reflect beliefs in which structures serve as vanguard components in representing or leveraging the overall capacity level of a jurisdiction.

⁹ According to the three types of concepts identified by Lawson et. al (2000).

¹⁰ For the EU's definition, see note 4 above.

Finally, some scholars treat capacity as a latent trait but abstain from explicitly defining it, focussing instead on elaborating the structural elements that are hypothesised to produce capacity. For example, Dimitrov et al. (2008) are concerned with a function-specific capacity of a part of government, namely, the core executive's capacity for coordination, and on the basis of prior literature identify eight structural aspects of the executive that hypothetically serve to produce this capacity. This handling of the term, as in other literature that discusses capacity as a product of governance arrangements, suggests a common understanding of the meaning of capacity in the sense of its general dictionary definition, i.e., "the power, ability, or faculty for anything in particular". 11

Operationalization

If capacity is conceived as a theoretical, or latent, construct, it cannot by definition be directly observed. Information about it can only be obtained by noting the characteristics or values of manifest (observable) factors that indicate its hypothetical or real presence (Skrondal and Rabe-Hesketh 2004: 1-9). The two possibilities for observing a latent construct such as capacity can be depicted using the notation and terminology of structural equation statistical modelling (see Figure 1).

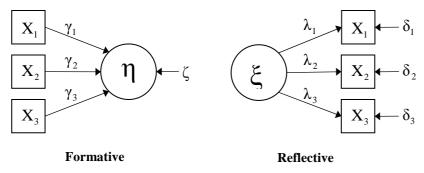


Figure 1. Formative and Reflective Measurement Models (Edwards and Bagozzi 2000)

Capacity in both models is denoted by the symbols eta (η) and xi (ξ) . The left-hand, formative model specifies that the antecedent manifest factors (x_i) are causes of the subsequent latent construct (η) . For example, particular institutional arrangements, operational structures or resources of the administration might be assessed and a composite assessment used to infer the existence of a particular level of capacity. These factors are understood to precede and jointly determine capacity. The disturbance term (ζ) represents that part of the construct (η) not explained by the manifest institutions, structures or resources (x_i) . The parameters (γ_i) depict the magnitudes of the effects of the manifest factors on the construct. This kind of formative measurement model is used to construct indexes, such as indexes of socio-economic status, consumer prices indexes or the UNDP's Human Development Index.

The right-hand, reflective model specifies that the antecedent latent construct (ξ) has direct effects on the subsequent manifest factors (x_i). For example, measures of bureaucratic

¹¹ "capacity" *The Oxford English Dictionary*. 2nd ed. 1989. *OED Online*. Oxford University Press. 17 Oct. 2008 http://dictionary.oed.com/cgi/entry/50032785.

behaviour or performance outputs or outcomes—exhibited, observable phenomena—might be assessed and collectively used to infer the existence of a particular level of capacity. Capacity is understood to precede and partially determine these behaviours or effects of performance. Variance in these manifestations (x_i) is attributed to the dependence of these factors on the underlying latent construct (ξ) and an error unique to each factor (δ_i) . The factor loadings (λ_i) depict the magnitudes of the effect of the latent construct (ξ) on the manifest factors (x_i) (Edwards and Bagozzi 2000: 161-162). This kind of reflective formative measurement model is used to construct scales. Governance indicators that are based on measures of bureaucratic actions or perceptions of those actions are examples of such scales.

If the research involves sufficient analytical units, a value for the latent construct can be estimated statistically using either of these latent measurement models (although, importantly, the statistical procedures of estimating each model are different). However, the logic of the relationship between the manifest and latent factors in each model also applies to qualitative observations of capacity.

The literature surveyed here observes capacity indirectly by using both formative and reflective manifest indicators and both quantitative and qualitative methods. As examples of formative indicators, Geddes (1994) uses reforms legislated and appointments to official positions to indicate bureaucratic capacity, events that are temporally distant from the latent concept; Doner et al. (2005) use the settings of particular configurations of formal and informal institutions to infer the existence of a particular kind or level of institutional capacity; Ingraham et al. (2003) assign scores to personnel, financial, information and performance management systems; and Hilderbrand and Grindle (1997) use observations of behaviours and events temporally very close to the moment of bureaucratic action to infer the level of capacity. (All of these examples except Ingraham et al. use qualitative methods.)

As examples of reflective indicators, Carpenter (2001) uses evidence that policy innovations were initiated by the bureaucracy, not the legislature, as the indication of high capacity; Hille and Knill (2006) use the World Bank's aggregate governance indicators, which statistically combine many observer ratings (mainly) of bureaucratic performance; and Bäck and Hadenius (2008) use ICRG commercial investor ratings of bureaucratic behaviour and corruption control. These examples also involve both qualitative and quantitative methods.

The choice of formative or reflective means of identifying capacity is vitally important with respect to the role of capacity in the analysis. For scholars seeking to identify explanations of capacity from within the institutional domain of the public administrative system, a reflective indicator of capacity is generally necessary. Conversely, for researchers analysing the influence of capacity on various measures of bureaucratic performance or social outcomes, a formative indicator of capacity would usually be preferable. Otherwise, the scholar risks using the same phenomenon to indicate both the independent and dependent factors. The literature reviewed includes examples of such tautologies. For example, Hille and

¹² Hilderbrand and Grindle (1997) assess: 1. Was the task effectively identified? 2. Were appropriate actions put in place to achieve the task? 3. Were skilled human resources assigned to accomplish the task? 4. Were resources used efficiently to accomplish the task? 5. Was the ability to accomplish the task sustained over time?

Knill (2006) use bureaucratic capacity, measured reflectively, to explain a form of bureaucratic performance that includes capacity reforms, measured formatively, and effectively regress the same phenomenon on itself. Unsurprisingly, the regression returned a p-value of 0.001.

Some definitions dictate the choice of either formative or reflective indicators of capacity. Thus, the purpose of the analysis must shape decisions about the nature of the definition as well as the choice of indicator. An example of the implications of these choices for the research design is Carpenter's qualitative analysis of the rise of bureaucratic autonomy. The author defines capacity as a threshold phenomenon, i.e., it obtains only when bureaucracies "perform with competence and without corruption and malfeasance" (2001: 47). Delimited by quality of performance, capacity must be identified by reflective indicators. The author uses evidence that policy innovations were initiated within the bureaucracy as the indication of (high) capacity. Capacity in this analysis serves as an independent variable. The dependent variable, bureaucratic autonomy, is also identified via several reflective indicators, one being evidence of entrepreneurial policy innovation. But this indicator is indistinguishable from the characterisation of demonstrated capacity. As the author notes, the marker of autonomy "is also the very demonstration of bureaucratic capacity on which reputations are built" (2001: 47). How then can one tell the explanatory and dependent variables apart?

Is administrative capacity a useful concept?

Administrative capacity has clearly had intuitive appeal as a theoretical concept in post-war political science literature. But it has not been established as a core concept in any research field. Despite the concept appearing intermittently over time, most scholars interested in explaining related phenomena avoid the term administrative capacity and refer to alternative concepts. They investigate the correlation of particular institutional constellations, processes and resource endowments internal to the bureaucracy with bureaucratic performance measures or economic outcomes (e.g. Knack and Keefer 1995; Evans and Rauch 1999; Rauch and Evans 2000). (In other words, they relate the construct's 'formative' elements directly to the 'reflective' effects of the construct.) Some scholars correlate bureaucratic performance measures with economic outcomes (e.g. Mauro 1995). 13 Others trace the impact of environmental factors on the performance of the bureaucracy (e.g. Tavits 2006) or on conceptions of "government quality" that combine settings of the bureaucracy as well as of policy (e.g La Porta et al. 1999). Some analyses focus on trajectories of administrative reforms without attending to whether the reforms had a discernable effect on bureaucratic behaviour. In fact, the overwhelming impression from the search for literature on administrative capacity is the extent to which the concept is not used.

What explains this absence or avoidance of the concept? Perhaps the concept's latency renders it not compelling for public administration researchers, especially those working in an empirical tradition. Administrative capacity cannot be directly observed, it is intuited to exist

¹³ The measures of bureaucratic performance are often the same as those used as measures of capacity (cf. Tavits 2006; Bäck and Hadenius 2008).

due to inadequately explained events, and its values are estimated indirectly via formative or reflective indicators. Thus no one can say with certainty of what it consists. Perhaps it is avoided because of its level of abstraction or aggregation. Public administration on any level of the state is a very complex phenomenon. To deduce a single trait emerging from a complex of institutions, organisational units, relationships and actions of individuals may not appeal to researchers wishing to shed light on the concrete and the particular. In fact, the relevant question may be rather why is the concept of capacity used at all?

It is clear that administrative capacity is used in some accounts merely as a rubric for the structures at the focus of the analysis (e.g. Verheijen 2007). This manner of use serves an important narrative purpose, although descriptive concepts would suffice and be more precise. But in most accounts the concept is clearly used to refer to something more than congeries of structures. Authors are referring to a distinct phenomenon: something more than the sum of its parts. As cognitive science tells us that humans invent theoretical concepts to explain perceived events that cannot be explained by perceptible objects or processes (Lawson et al. 2000), the persistent reappearance of capacity as a concept in disparate sub-disciplines suggests that researchers are intuiting something at work that explains differences in bureaucratic performance better than more observable phenomena such as an administration's institutions, systems, procedures and people or additive combinations thereof.

What might this distinct phenomenon be? The latent factor intuited to be present could be the collective effect of the structures, personnel and the unseen processes at work when a system is dynamically operating. This intuition is evident in the literature on public management, with its concentration on the human element in administrative processes, as well as in the governance literature, the distinctive character of which is to view systems holistically and dynamically. The elements of the system are non-additive and it is impossible to observe the latent factor by specifying the core elements. Rather, the core elements or particular configurations thereof can only indicate the values of the factor, but the dynamic of the system in different settings implies that the validity of the specification must be regularly reassessed.

The latent factor may be understood to exert an influence on all structures or parts of the system under scrutiny, which explains why each part, when assessed, would score in a similar range on a scale, i.e. why the scores would co-vary. Taking an obvious analogy from factor analysis in psychology, the characteristic for the jurisdiction would be akin to Spearman's (1904) general factor in human intelligence ("g"). That is, performance in one area of activity shares something in common with performance in all other areas of activity. Residual variation in performance is determined by area-specific capacity, which is unique to the area of activity and not represented by the common general factor of capacity.

Another reason why authors may use the concept of capacity is that it enables comparison of unlike administrative systems, especially via quantitative methods. The literature surveyed shows that some systems are very difficult to compare productively. For example, the East Asian countries referred to as 'newly industrialising countries' (NICs) of the 1980s and 1990s were identified to have distinctive institutional configurations that explain their industrial policies and rapid economic growth. But other countries or regions of the world have different institutional configurations that foster high growth rates through

different dynamic mechanisms (Hall and Soskice 2001). The concept of capacity draws attention to the behaviour that specific parts of the system induce, which may be compared in terms of its impact on bureaucratic performance or social outcomes. This rationale suggests using reflective indicators of capacity and exploring the institutional features of bureaucracies as explanatory variables.

Similarly, the concept of administrative capacity may be useful when comparing agencies or units that belong to the same jurisdiction but have effects of incomparable nature. For example, Skowronek (1982) compares the evolution of three U.S. administrative institutions—the civil administration, the army and the regulation of the national railroads—from 1877 to 1920. The outputs or performance indicators of these sectors would be substantively different and difficult to compare. Instead, Skowronek compares these institutions in terms of certain administrative characteristics, namely their basic organisational orientations, procedural routines and staff expertise, which "in combination, constitute the capacities of the state" and determine the "mode of governmental operations" (1982: 31). Similarly Carpenter (2001) compares three U.S. agencies—the Department of Agriculture, the Post Office and the Interior Department—in terms of the emergence of organisational autonomy. As discussed, autonomy is largely identified in terms of exhibited capacity, that is, evidence that the agencies initiated policy innovations. This factor is easier to compare than would be the standard indicators of performance of such disparate agencies.

Finally, the literature review revealed that some authors may use the concept and measures of capacity as a proxy for government performance, since standard performance indicators—e.g., infant mortality, crime, the condition of the natural environment, poverty, economic growth—are not determined solely by the actions of the governments, but also by the actions of the private sector or by external conditions. Capacity indicators, such as those of Ingraham et al. (2003), have been used to meaningfully compare the performance of entities of the same level of analysis, such as agencies and local, regional or national governments.

Conclusion

This literature review reveals that administrative capacity has been invoked as a core concept intermittently yet consistently over time. Definitions, though tailored to the various contexts under scrutiny, share a common core in characterising capacity as an intrinsic ability of the public administrative system. Authors delimit their definitions by asserting a core function or group of functions that the system under scrutiny must perform and often identify the parts of the system that are most essential to performing the function. But the longstanding common conception of capacity as a power, ability or faculty in diverse and insular literatures suggests that, as a background concept (Adcock and Collier 2001), administrative capacity is remarkably stable.

The review has suggested that the concept has not gained widespread acceptance due to its latency and level of abstraction, which make direct observation of the phenomenon impossible and its identification difficult. But it has likewise suggested that capacity continues to appear in different literatures because it represents an ontologically real and

distinct phenomenon and is practically useful in comparing unlike entities or in isolating the effects of public administration from other societal actors or external factors.

Based on the foregoing, we may conclude that administrative capacity is a useful concept for further research but, when invoking the concept, researchers must consciously make choices about its definition and the means of observing it and carefully consider the implications of these choices.

Concerning definitions, it should be noted that simply declaring certain structures, systems, mechanisms or resources to constitute capacity can lead to the fallacy of 'best practice' thinking. That is, equating high or low capacity with the settings of certain ideal-type configurations of institutions runs the risk of deducing capacity gaps that might not actually exist in a particular jurisdiction. Doing so may divert attention from the effort to identify the causal source of effective or ineffective actions or outcomes. This fallacy is risk in the practitioner literature. For academic literature the risk of defining capacity as its institutional causes is that doing so rules out alternative operationalizations of the concept, which inhibits the iterative process of collective conceptual development.

Concerning means of observation, when capacity is operationalized using formative indicators, the measurement validity of the selection of indicators remains a hypothesis until the capacity values are correlated with institutional effects or performance outcomes. Similarly, when capacity is operationalized using reflective indicators, it would be a mistake to assume high capacity if performance is good, as performance measures are influenced by forces other than bureaucratic action. Reflective measures must be correlated with observable elements of the bureaucracy to be confirmed as valid indicators of capacity.

Furthermore, when deciding whether to observe capacity indirectly via formative or reflective indicators, the objectives of the research must be borne in mind. If one aims to analyse to what extent certain structural configurations or elements internal to the bureaucracy are correlated with administrative capacity, reflective indicators of capacity are preferable. If one wants to estimate the effects of administrative capacity on performance, formative indicators of capacity are preferable. Lack of care in these decisions can lead to tautological statistical analysis or difficulty in distinguishing independent and dependent factors.

Finally, this analysis suggests that use of the concept of capacity is justified only when referring to a distinctive phenomenon, that is, to the non-additive, collective outcome of the dynamic operation of an administrative system that exerts a common influence on the performance of all parts of the system. If perceived events can be adequately explained by perceptible objects, agents or processes, there is no reason to invoke administrative capacity as a theoretical concept. The corollary of this assertion is that administrative capacity refers to an intrinsic trait or ability of the selected administrative system and must be treated as a latent variable in empirical analyses.

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