

# **FROM SOLID TO MEANINGFUL PROBLEM-DRIVEN METHODOLOGY IN PUBLIC ADMINISTRATION**

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## **ABSTRACT**

Qualitative methods are relatively scarce in public administration research. This imbalance between qualitative and quantitative methods poses three significant concerns. First, there is a risk that measurement hurdles, coupled with the distance that quantitative methodology fosters between academics and administrative practice and practitioners, focuses researchers' gaze on inconsequential policy problems. Second, and related, the causality underlying the real problems that policymakers and public organizations face are often much too complex to be captured by one type of methodology, and quantitative methods, which are by design insensitive to context, are particularly ill adapted to such task. Third, quantitative methodology is most conducive to testing already available theories and hypotheses, as opposed to theory building. We propose that the answer to these concerns lays in denouncing commitments to abstract ontological and epistemological philosophies and advancing collaboration between qualitative and quantitative researchers and version of mixed methods that transcend mere triangulation. Still, doing so would tell us little as to what problems are worth studying, and how to balance the values of theoretical generalizability and policy significance.

## INTRODUCTION

Social-science methodology textbooks, and research-methods courses, commonly mirror the taken-for-granted division between qualitative and quantitative research. This division is said to embody not only different technical tools for data collection and analysis, but incommensurable, that is logically incompatible, philosophical traditions, pertaining to divergent beliefs about ontology and epistemology. Crudely stated, these textbook distinctions associate quantitative research with a positivist paradigm that conceives of reality as consisting of generalizable patterns of cause and effect, which can be objectively known through deductive hypotheses generation and their empirical verification. A related philosophical approach, post-positivism, is associated with a commitment to objectivity, alongside recognition of the difficulties to fully access and explain the objective reality, and thereby with a preference for hypotheses falsification over verification. Conversely, qualitative research is often associated with a constructivist paradigm, which stresses the multiplicity in social constructions of reality, and the limitations and subjectivity of coming to know them. Consequently, constructivists aim to inductively unpack participants' actions based on their situated, shared, interpretations of their social environment, which the researcher investigates and construes, employing her distinct, non-replicable, vantage point.

A recent systematic review of the state of qualitative methodology in public administration (Ospina et al.,2018) reiterates these institutionalized distinctions and cautions qualitative researchers to pay closer and careful attention to where they stand on the postpositivist-interpretivist divide (ibid, 2).The authors go on to criticize qualitative researchers, in public administration, for their failure to explicitly self-define their orientation and commitment to the interpretivist versus post-positivist traditions (ibid, 6). Their analysis of 129

qualitative papers, published between 2010 and 2014, in six key public administration journals, indicated that most authors did not signal their fundamental ontological and epistemological convictions, and that only 24% adopted what the authors coded as an interpretivist approach. The authors acknowledge both issues with lament, hypothesizing that this omission may be a function of ignorance or carelessness among the community of qualitative researchers.

Whilst appreciative of the important contribution of Ospina et al's (2018) paper to mapping the state of the field, this paper reaches different conclusions. Contrary to the above criticism and lament, we offer that in today's public administration research, which is dominated by quantitative studies, it would be artificial and unnecessary for qualitative researchers to avow definitive allegiance to abstract notions of ontology and epistemology and to distinct methodological camps. We further suggest that the near exclusivity of quantitative research, which is the problem to be addressed, raises significant concerns. First, it likely contributes to our collective failure to address critical problems that governments face (Milward et al, 2016; Moynihan, 2017; 2018; Roberts, 2018). Second, it may lead to our provision of overly reductionist explanations for what are often complex, wicked, problems. Third, it hinders theoretical innovation in our field, leading us to focus on more of the same, relying on existing indices and datasets. Drawing on the developments in adjacent fields and promising changes in ours (Hendren et al. 2018; Honig, 2018; Mele and Belardinelli, 2018), this paper offers versions of mixed-methods that transcend mere triangulation as having the greatest potential to ameliorate these concerns. We start, however, with some building blocks, conceptualizing what we mean by qualitative, quantitative and mixed methods.

## **QUALITATIVE, QUANTITATIVE AND MIXED METHODS**

Qualitative and quantitative research methods both involve an array of data types and techniques of analysis. Qualitative methods are associated with case studies, which may be historically and geographically bound events, organizational units or individuals, among others. Data regarding these cases may be drawn from participant or non-participant observations, from semi-structured interviews, focus groups or from narrative analysis of text. Quantitative data collection and analysis comprises observational data, indexing human behavior or non-human factors, survey data reflecting human perceptions, and experiments, with the latter involving a variety of laboratory, survey-based and natural designs.

Still, the above assortment of research techniques does not tell us how qualitative and quantitative methods fundamentally differ. A distinction, suggested by Gerring (2017), which we espouse, rests on the comparability of data observations. Qualitative observations are heterogenous or non-standardized, and therefore non-comparable. In quantitative data, conversely, heterogeneity is reduced, by construction, to facilitate comparability. Thus, whilst the differences and similarity between qualitative cases – countries, organizations, individuals, historical events – can be analyzed, the observations themselves are non-standardized, since they are embedded in context, and their comparison therefore calls for interpretation. Moreover, whereas qualitative data can be converted, through standardization and reduction, into quantitative data, the opposite cannot be done. What this means, for this paper, is that qualitative data, by definition and construction, provides a richer, yet not easily comparable, depiction of cases in context.

The above conceptualization, and the aim of this paper, leads us to conceptualize mixed methods as a “type of research in which a researcher or a team of researchers combines elements

of qualitative and quantitative research approaches” (Johnson et al. 2007). The mixing of methods can take place at the stage of data collection or data analysis (Small, 2011), although what we have in mind in this article are projects in which mixing occurs at both stages. As discussed further below, the goals of such mix may differ, ranging from triangulation, in pursuit of more valid theory testing, to provision of more comprehensive answers that account for difficult-to-measure factors, multiple causal chains and unexpected explanatory variables and micro-mechanisms. Echoing the concerns of leading scholars in our field (e.g. in Milward et al, 2016), we propose, below, that the latter goals – provision of comprehensive answers and research innovation, as opposed to mere triangulation - is why mixed methods is so crucial for the continued advancement of public administration research.

## **SIDELINING ARTIFICIAL DIVISIONS**

In other domains of social science, such as comparative political science, international relations and sociology, for example, mixed-methods, combining quantitative and qualitative tools within the same project or research program, is increasingly seen as the gold standard for high quality research (Lieberman, 2005; Seawright, 2016; Small, 2011; Tarrow, 2010; but see Ahmed and Sil, 2010 for critic). In public administration, studies employing mixed-methods are still uncommon, albeit increasing. Mele and Belardinelli (2018) identified 104 articles out of 2,147 published papers (5%) ,published in six key public administration journals between 2011 and 2017. Hendren et al. (2018), analyzing three key public administration and three public policy journals, report a much lower rate of 1.82% in the 2010s, which is nonetheless 3.6 time as high as the rate of such studies in the 2000s.

The community of mixed-methods researchers views the incommensurability of abstract ontological and epistemological assumptions, as to the singularity of reality, and our ability to know it, as disconnected from practical questions regarding the possibility to combine qualitative and quantitative research methods within specific projects (Morgan, 2007). Instead, they offer a distinct approach, rooted in philosophical pragmatism (Johnson et al. 2007; Johnson and Onwuegbuzie, 2004; Morgan, 2007; Small, 2011), which suggests that methods should follow from the challenges posed by significant research questions. Concerns with ontology and epistemology should guide research design based on the actual consequences of alternative truth claims (Sil and Katzenstein, 2010). Thus, according to this approach, researchers need to consider the potential consequences of divergent assumptions about the world (ontology), and the ability to know it (epistemology), for their choice among an array of methodological tools within concrete research projects. For instance, if one suspects that the motivations to enter the civil service in developed and developing economies differ, due to distinct institutional and structural conditions (ontology), then one should commence with methodological tools that enable rich understanding of these differences (epistemology), before considering embarkation on further non-standardized, structured, measurement of the variation in motivations across different cultural contexts.

We feel, for the following reasons, that the pragmatic approach, as advocated by the mixed-methods movement, is not only applicable, but vital for public administration. In contemporary public administration studies, quantitative research is by far the dominant practice. Ospina et al. (2018) find that between 2010 and 2014 less than 8% of articles published in the discipline's six leading journals employed pure qualitative methods. Namely, qualitative research, whether pure or within mixed-methods projects, is either seldom carried out, or

relegated to less prestigious journals. Consequently, we feel that whether qualitative research, in public administration, adequately represents the interpretative versus [post]positivist traditions is hardly the issue at stake. Our full attention should be given to the consequences of the dearth of qualitative data collection, on which we elaborate further below, and how they might be overcome.

Moreover, the findings of Ospina et al. (2018) indicate that the few qualitative studies that are published in the key journals of public administration are almost uniformly of high quality. The authors find that of the 129 qualitative studies that they reviewed “most studies (119; 92.2 percent) articulated an explicit research question ... [and] connected well to theory, both in terms of study motivation and implications” (ibid, 6). Hence, qualitative research in our field, at least that which survives the review process of the key journals, is of fine quality yet in short supply. The way to invigorate it, in our opinion, is not by calling on qualitative researchers to adopt strong commitments to abstract ontological and epistemological notions. Rather, it is by challenging pure quantitative researchers to consider the limitations of their research, and the qualities and advantages afforded by qualitative research and researchers. Our belief that this challenge is not only needed, but within reach, is reinforced by two additional points.

First, we suspect that the supremacy of quantitative methods, in public administration, is not a reflection of quantitative researchers’ abstract ontological and epistemological assumptions as to the singularity of reality and our capacity to objectively know it (cf. Morgan, 2007). Rather, the preference for quantitative methods is shaped by our membership in a scholarly community that implicitly guides us to privilege statistical data and methods as more rigorous than qualitative. This guidance is reflected, inter alia, in the biases of public administration research training, where PhD programs, in leading public affairs schools, put their emphasis on

quantitative methods, whilst relegating qualitative methods to electives (Durant in Milward et al, 2016). In these circumstances, inducing quantitative and qualitative researchers' polar commitments to distinct philosophical traditions may only legitimize the current imbalance in research methods and teaching programs. Instead, we feel that what is needed is profound appreciation, by leading journals, schools and researchers, that the choice of methodology, in an applied field like public administration, should be driven not by allegiance to any one philosophical tradition, nor by the limitations of research training programs, but by the pursuit of significant research questions, relevant to both theory and practice. A research community led by significant questions is more likely to appreciate that any methodology has its limitations, and that methodological pluralism is called for to provide valid answers to the questions that matter.

Second, in line with the above, those who carry quantitative research, in public administration, do not seem to discount the importance of humans' subjective perceptions. Rather, they often seek to unravel the variation in citizens' attitudes and in civil servants' values and beliefs, and we assume that they would acknowledge that these attitudes and beliefs likely vary across cultures. Thus, the abstract ontological and epistemological assumptions of qualitative and quantitative public-administration researchers are not necessarily different. The problem is that quantitative researchers seek to penetrate individuals' socially constructed realities without direct access to individuals' unstructured accounts and experiences. This, again, stresses that commitment to methodological tools, as opposed to philosophical assumptions, currently drives research design. Yet, given their common theoretical goals, qualitative and quantitative public administration researchers can both benefit by working together and enriching their capacities.

## **WHAT'S WRONG WITH THE NEAR EXCLUSIVITY OF QUANTITATIVE RESEARCH?**

Research pluralism is not, in our opinion, an end in and of itself, and we would not expect quantitative researchers to expand their methodological toolkits, or to collaborate with qualitative researchers, just for the sake of a more interesting and diverse research field. Rather, we believe and seek to convince that much is significantly lost by the current scarcity of qualitative methods, and of the importance of flexible bricolage of qualitative and quantitative data collection and analysis. To do so, this section identifies what we see as three linked detrimental consequences of the unbalanced present circumstances in our field.

### **Employing Rigorous Methods to the Wrong Questions**

Public administration took off, as field of study, in the 1930s and 1940s. Its founders, influenced by the 1930s Great Depression, were concerned with the capacity of the state to cater for citizens' needs, amidst economic and social turbulence, as well as with human rights and freedoms vis-à-vis the state. Their resultant analytical focus was on the development and functioning of administrative systems. The research that they sought was strongly connected to and embedded in related fields, most notably political science and international relations (Roberts, 2018). Reflecting these roots of concern with real-world systemic failures, and the bonding between public administration and political science, Riccuci (2010) writes:

“[P]ublic administration is an applied field ... concerned with applying scientific knowledge to solve practical problems in highly politicized environments. The real world of government and nonprofits is our laboratory; we do not bring subjects and specimens into the lab as the physical sciences do. Most of our research is conducted in

the “field”, and it is aimed at improving government or, more specifically, arriving at a better understanding of it so we can seek to improve governing operations in this country and beyond. But because politics drives performance in public agencies, our understanding of government and how it operates in practice are in a constant state of flux ...the task of public administration will always revolve around practical applications of solving problems in the real world, which is highly political, fragmented, and transitory” (ibid, 25).

Riccuci’s (2010) description of the field and its contribution to solving real world problems in the US and beyond, might boost the self-esteem of the readers and author of this paper, as members of an important research network. However, it is debatable whether this depiction in fact reflects the contemporary reality of public administration research. Several prominent commentators, who think otherwise, have recently noted that public administration has with time retreated from a focus on the macro-level functioning and historical development of the administrative state to narrowly-constructed, micro-level analyses, involving agencies or citizens and civil servants’ individual perceptions. Whilst these foci are also important, significant information is lost when research overlooks macro-level institutions and longitudinal analysis. They further criticize current public administration research for neglecting no less than the effect of politics and power relations. Moreover, these commentators have pointed to public administration scholarship’s almost exclusive focus on the study of developed economies and democracies, and the irrelevance of most of its finding to developing countries (Milward et al, 2016; Moynihan, 2017, 2018; Roberts, 2018).

We doubt that the above shifts in research foci reflect researchers' beliefs that power relations, historical developments, cultural norms, institutions and other macro-level factors are inconsequential, or that one can validly extrapolate from findings regarding developed democracies to the rest of the world. Rather, we feel that it is safe to assume that methodological preferences have, partly, shaped these changes. To be sure, the dominance of quantitative, over qualitative, methods is not solely to blame for the restricted gaze of extant public administration research. Indeed, Milward et al. (2016), Roberts (2018) and Moynihan (2018) all point their finger at the Public Management movement, which sought to reform, and arguably successfully vanquished, Public Administration. Still, the types of methods that we, as a community, tend to employ undoubtedly shape the questions that we choose and can address and their potential significance for the real-world.

Some research objects lend themselves more easily than others to quantification. Informal institutions and their variation across and within countries (e.g. levels of politicization, beyond overt political nominations at the organizational apex) are much more difficult to validly measure compared with formal rules (e.g. civil service recruitment and promotion rules). It is therefore understandable that we often choose to focus on things that can be more easily measured, or to rely on existing, publicly-available, datasets, even when their validity is doubtful, over laborious data collection and qualitative coding. As far as researchers employ meaningful proxies for difficult-to-measure factors, then their decision to forgo time consuming qualitative data collection is merited. When this is not the case, we may be ignoring factors that have important consequences for governments' performance and its impact on citizens.

Moynihan (2018) makes this point with regards to the limitation of experimental research to

unravel the political underpinning of “administrative burdens”, that is the costs that are imposed upon vulnerable social groups, thus:

“Within public administration, many topics raise important questions that do not lend themselves to experiments ... the subject [of administrative burdens] yields many relevant behavioral questions about how psychological factors affect citizen-state interactions but also highlights issues that can best be narrated using an observational approach, such as the role of politics and power in the deliberate creation of these burdens in real policy settings” (Moynihan, 2018: 4).

Additionally, as noted by Mauricio Dussauge-Laguna (in Milward et al, 2016), the privileged status of quantitative data and methods explains why current public administration research tends to focus on few countries, most notably US and Western, Central and Northern Europe, for which such data is most conveniently available. In turn, it is not surprising that public administration is predominantly the study of public organizations in economically advanced democracies. Still, even in US and Europe, data on the inner workings of the state, such as bureaucrats’ intricate relationships with populist heads of state for example, is not openly available and calls for access negotiations and laborious qualitative research. Conducting such research requires motivation and skills, both of which entail a supportive institutional and research community that values qualitative studies.

Last, but possibly most important, is the apparent consequence of advances in statistical methodology for public administration researchers’ aloofness from practitioners. Bibliometric analysis of Public Administration Review (PAR), by Nil et al. (2017), reveals a sea change in the discipline. Whereas in the 1940s 60% of the articles published in PAR were written by

practitioners, mostly as solo authors, by the 2010s only 6% of articles involved some contribution by non-academics mainly as joint authors with academics. Again, the dominance of quantitative methods is unlikely to be the sole culprit. Still, sole reliance on quantitative data, over interviews and observation, distances researchers from direct interaction with practitioners. At the same time, the reliance on highly sophisticated statistical methods imposes a high barrier for practitioners' contribution to academic dialogue. Practitioners' views, when sought, are delimited to pre-determined questions, most notably via structured surveys, leaving little space for their experience-based ideas. The result is that contemporary public administration researchers are seldom exposed to practitioners' input as to the practical problems that they face, and that academics might want to help them address. Distance from practitioners, and the widening divide between academia and practice, probably leads many public administration academics to believe that practitioners' views have little to instruct them. Yet, as suggested by Donald Kettle, if one wants to have an impact in the real world, then "there is great value in listening carefully to policymakers about the questions to which they most need answers, and in trying to provide insights on the struggles that are most important" (Milward et al. 2016: 329).

The above does not entail that we should relinquish quantitative data and its analysis, and forgo the significant advancements made in methodological rigor. Rather, following the call of Milward et al. (2016), we may want to challenge ourselves to think of the varied "big questions" facing current public organizations and the state, in our diverse nations and societies, and to tailor methodology to this end, as opposed to adapting our research questions to existing datasets, validated indices and methodological fashions. The preparedness to diversify research methods is, of course, just a first step. It will not tell us what are, or should be, these significant "big" questions. This is a value-laden issue to be determined by our individual and collective

normative preferences, and our perceptions of what would make a significant theoretical and practical contribution to the field and to our distinct societies.

### **Providing Reductionist Answers to Complex Questions**

The problems that policymakers confront are often very complex. Take, for example, governments' current need to enable social and economic integration of distrustful and vulnerable immigrant communities, amidst rising public xenophobia and populist parties' successful ascendance to power. Such issues involve ambiguity as to the prioritization and definition of problems to be addressed, uncertainty as to the efficacy of the solutions at hand and need for careful management of the opportunities and constraints posed by institutions, contradictory political pressures, and unexpected events.

Public administration scholars, who seek to make sense of governments' handling of such highly complex problems, need to be able to provide a convincing causal story about the relationships between path-dependent structural and institutional macro-level factors, changing external contingencies, individual-level beliefs and strategies, and their association with processes, outputs and ultimately outcomes. The latter likely involve a mixed bag of part failures and part successes, as interpreted by those involved and the researcher. A valid explanation is likely to be context specific, relating to actors' interpretations of changing political constellations and events. Consequently, the prospects for generalizations drawn from such analyses, despite their substantive significance, is, unfortunately, likely to be limited. In the best-case scenario, as suggested by qualitative set-theoretic approaches (Ragin, 2009), generalizations, adequately carried out, would depict how different factorial configurations lead to similar outcomes.

The quantitative alternative to such complex, context-rich, analyses, is to focus on some reduced proxies for a limited number of hypothesized factors, to account for complexity via interactions among these factors, and to assess the association of the latter with a proxy for the studied outcome. Yet, as far as the reality that the researcher seeks to explain involves difficult to measure factors and diverse outcomes, and multiple, independent, causal chains, then the reduction of factors, and a statistically parsimonious model solution, would provide us with a distorted, immaterial, picture. Whatever explanation it would yield, would account for very little of the variation in the real, multidimensional, outcome, as opposed to its reduced proxy (cf. Robert Durant in Milward et al. 2016: 331).

Consequently, the more public administration scholars seek to address concrete, complex, problems, and to provide valid and useful answers that practitioners would also value, the more they are bound to transcend statistical data collection and analysis, alone, in pursuit of better understanding of human behavior, in context. Still, this does not entail that quantitative methodologies have no role to play. Within such multifaceted research projects, researchers are likely to find it useful, and meaningful, to quantify some factors or outcomes to facilitate interpretation, whilst employing qualitative analysis in relation to other factors and their effect.

This, of course, is not to suggest that policy and administrative issues are all complex, wicked, problems, which call for context-specific explanations. The nature of the problems that governments confront is an ontological question, which has epistemological and thereby methodological implications. However, since the nature of problems (ontology) and how they might be studied (epistemology) are not universal, one cannot derive guidance from abstract philosophical paradigms. Rather, a pragmatist approach suggests that researchers need to make

informed choices, and to tailor methodological tools, and the possible mix of quantitative and qualitative tools, based on their understanding of the problems at hand.

### **Missing Opportunities for Theory Building and Research Innovation**

Our above points, regarding the need to tailor methodology to the study of real-world problems and their complexity, seem particularly pertinent to public administration. Our last point applies more generally and regards the hindering consequences of the exclusivity of quantitative research for theory building and research innovation. Observational quantitative data analysis may point at potentially important empirical patterns. However, statistical analysis, alone, specifically that which relates to behavioral or material indices (e.g. students' performance in tests, or class size, respectively), as opposed to perceptual indices (e.g. students' beliefs about their ability to succeed), cannot account for the micro-mechanisms that underlie observed empirical patterns. This is an obvious case where other methodologies are called for to supplement and advance our understanding of the statistical findings. In public administration, specifically, what is also called for is practitioners' unstructured "practical theories" as to the possible mechanisms at play.

One way to unravel the micro-mechanisms underlying opaque statistical associations is to carry out quantitative survey-based questionnaires and experimental studies, with the latter perceived as the gold standard for identification and isolation of causal mechanisms. Yet, surveys and experiments are relevant as a means for testing established theory and hypotheses. In the absence of clear hypotheses, as to the micro-mechanisms at plays, researchers would do best to rely on less structured, qualitative, data (Johnson and Onwuegbuzie, 2004). Interviews and focus groups, for example, provide researchers with access to participants' non-structured

narration of their experiences and concerns. Ethnographic observations of interactions among participants may reveal taken-for-granted norms and behaviors that participants themselves may be unaware of, and thereby unable to elucidate in an interview. Once better understood, such micro-level understanding may result in clearly formulated hypotheses that may be quantitatively operationalized and analyzed. As suggested, for example, by Gerring (2017):

“[Q]ualitative data are likely to be more important when not much is known about a subject and when the goal of the researcher is to develop a new concept, uncover a new hypothesis, or shed light on unknown causal mechanisms. Qualitative data are ideal for exploratory analysis. More generally, one might argue that social science knowledge usually begins at the qualitative level and then (sometimes) proceeds to a quantitative level” (ibid, 20).

This argument, as to the division of labor between qualitative and quantitative research, and the aptness of the latter for theory and concept building, and as means for illuminating the mechanism underlying unexplained statistical associations is uncontroversial. Thus, from a theory building perspective, there is really no excuse for the dearth of qualitative research in public administration.

## **MIXED METHODS AS AN ALTERNATIVE PARADIGM**

Mixed-methods has emerged since the 1990s as a prominent alternative to the positivist-constructivist science wars. Providing a comprehensive analysis of the methodological literature on mixed methods is beyond the scope of this paper. In other fields, there are numerous reviews (e.g. Small, 2011) and typologies of different types of mixed methods, which readers may want to consult (e.g. Johnson et al. 2007; Johnson and Onwuegbuzie, 2004; Leech and Onwuegbuzie,

2009; Lieberman, 2005). Key differentiating factors, which extant typologies highlight, involve three design features. First, the blend of the mix, i.e. the extent to which a project equally or unequally employs qualitative and quantitative data and analysis. Second, whether qualitative and quantitative data are collected, and analyzed, in parallel or sequential modes, and if sequentially – whether the research project involves qualitative → quantitative versus quantitative → qualitative data collection and analysis phases. Third, the extent to which the collection of qualitative and quantitative data is “nested” so that it pertains to the same objects, be they individuals, organizations, countries and so forth, or to different research targets. Where nested – the qualitative data collection normally regards a subsample of the larger N, yet this again depends on the preferred balance of qualitative and quantitative data and analysis.

Recent work in public administration has depicted the extent to which public administration scholars employ mixed methods designs, and some of the variation in their approaches against existing typologies (Hendren et al. 2018; Mele and Belardinelli, 2018; Riccucci, 2010). Mele and Belardinelli (2018) find that sequential designs were more common than parallel ones (69% vs. 31%), and that more than half of the sequential designs involved a quantitative phase followed by qualitative data collection. They also find that nested research designs were commonly used within their research sample. The authors do not explicitly address the extent to which researchers in our field tended to employ balanced designs, although they do report that it is often the case that the interview data receives meagre attention at the data analysis and conclusion stages.

The pragmatic philosophy of mixed methods entails that one’s choice among the above design features should follow the goals that mixed methods are intended to serve. Thus, in what follows, building on existing typologies (Johnson et al. 2007; Small, 2011), and most notably on

that of Greene et al. (1989), we elaborate on the different aims of mixed methods research and their relevance for our above concerns with addressing significant problems, handling complexity and ensuing research innovation. See Table 1 for a summary.

In its most familiar and widely-accepted format mixed methods research is aimed at *triangulation*. Indeed, the connotation of mixed methods with triangulation is so strong that many see them as one and the same (cf. Riccucci, 2010: 5). The assumption underlying triangulation is that all methods have their biases, thereby creating a validity risk, which is best overcome through their combination. By employing mixed methods for the sake of triangulation, testing the same research hypothesis via different data sources and analyses, researchers seek to enhance confidence in the validity of their findings. A restrictive conceptualization of this aim suggests that it involves qualitative replication of the findings of the initial large N study, showing the effect of the same variables by other means. Yet, the logic of triangulation, as we understand it, extends to verification of micro-mechanisms – e.g. assessing whether a researcher’s theoretical claims regarding the effect of a certain variable on the dependent variable are compatible with participants’ own understanding of their actions and motives or those of others.

In terms of research design, the theory-testing logic of triangulation calls for a sequential, nested, analysis, in which qualitative methodology is intended as an additional verification for the quantitative findings and asserted theoretical exposition. Yet, if this is the aim, then triangulation does not necessary entail combination of qualitative and quantitative methods. Employing different types of quantitative methods, most notably observational and experimental data, would equally, and arguably better, serve the aim of theory testing by other means. Schram et al. (2009) and Pedersen et al. (2018), for example, successfully combine administrative data

and vignettes administered to social workers to establish that African Americans welfare recipients are more likely to be sanctioned when breaching the conditions of their benefits.

Pertinent for this paper, triangulation, even at its best, has little to offer as a means for studying the effect of variables that are difficult to quantify, complex causal chains and for innovative theory building. Triangulation entails that quantitative and qualitative data, and their analysis, are employed to address the same hypothesis. It is not intended to transcend the limitations of quantitative methods by employing qualitative methods to measure and assess hypotheses, which are less amenable to quantification. Similarly, it is not meant to allow deployment of different types of methods to different facets of a complex research question and causal chain. Moreover, as far as innovation is considered, triangulation is aimed at rigorous testing of existing hypotheses, and not at the pursuit of new theory and concept building. Hence, as far as the concerns of this paper go, triangulating quantitative and qualitative data is “much ado about nothing”.

Two other possible goals of mixed methods seem more relevant for addressing our above concerns as far as they regard research innovation and theory building. Conducting mixed methods with the aim of *development* entails using the results of one method (e.g. quantitative) to inform further investigation through another method (e.g. qualitative), thus informing hypotheses formulation, measurement decisions, and further research within the same or subsequent projects. Such design would typically commence with an exploratory, theory-building, qualitative stage followed by large N theory-testing quantitative study. Alternatively, development may be induced by unexpected quantitative results, which lead the researcher to engage in a qualitative research phase intended for hypotheses refinement or reconstruction. This is a classic case where a sequential research design and nesting – i.e. conducting qualitative

analysis of a selected sample of quantitative units – are likely to be mutually useful.

Occasionally, however, a development-oriented research may proceed with a qualitative theory-building research in one context, followed by quantitative research intended to assess the emerging hypotheses in a different context, as opposed to nesting.

A more radical approach to research innovation – *initiation* – employs triangulation of methods and hypothesis testing, not in pursuit of corroboration and replication, but with the aim of “discovery of paradox and contradiction” (Greene et al. 1989: 259). Thus, in this case, the deployment of different methods to test the same hypothesis is intended to expose the weaknesses of existing theory, and to initiate new research questions, concepts and theory. For example, qualitative research may be sought to indicate that a well-established association between an independent and a dependent variable is spurious, calling for further large N study. Design wise, initiation may be based on investigation of an outlier case, to decipher the boundary conditions of a theoretical proposition, or, more ambitiously, it may involve studying an archetypical case to expose the flaws in the current theoretical exposition.

Finally, two additional possible aims of mixed methods – *complementarity* and *expansion* (Greene et al. 1989) – seem the most relevant for the study of complex problems, and for addressing our concern that limits of measurability are driving the narrow scope of research questions in public administration. Both goals are compatible with what Honig (2018) has labelled “mutually supportive mixed methods”, wherein qualitative methods are employed to “fill holes” in econometric research, and quantitative methods are used to transcend the limitations of case studies.

Complementarity involves deployment of data and results obtained through one method (e.g. qualitative) to clarify and elaborate those obtained through another method (e.g.

quantitative). In this case, “qualitative and quantitative methods are used to measure overlapping but also different facets of a phenomenon, yielding an enriched, elaborated understanding of that phenomenon” (Greene et al. 1989: 258). Thus, compared with triangulation, complementarity employs different methods as a means for transcending their inherent limitations, as opposed to a concern with measurement errors. Relating to our above concerns, complementarity is most relevant for the assessment of difficult-to-measure variables (such as culture, for example), as well as identification of micro-mechanisms.

In terms of research design, Mele and Belardinelli (2018) provide many useful examples wherein researchers started off with quantitative data collection and analysis, to establish some general patterns, and thereby proceeded to qualitative data analysis to make sense of their initial results and identify the underlying micro-mechanisms, which could not be otherwise deciphered. Still, one could equally think of a parallel design, as in Gilad and Alon-Barkat (2018), in which researchers employ surveys and interviews, with the same participants, to systematically capture associations between reduced statistical measures, whilst allowing understanding of the internal variation that these measures conceal through interviews.

The key example that Honig (2018) puts forward, although this does not exhaust the contribution of his paper, relate to the importance of qualitative data analysis to account for the effect of time-invariant differences across organizations or countries (e.g. an agency’s independence or a country’s level of democratization) that econometric analysis cannot rigorously estimate due to full multicollinearity with agency or country fixed effects.

Finally, employing mixed-methods for the sake of expansion is particularly suitable to the research of multifaceted problems, involving multiple levels and causal chains. This type of analysis seeks to “increase the scope of inquiry by selecting the methods most appropriate for

multiple inquiry components” (Greene et al. 1989: 259). Again, mixed methods, here, is used not for the purpose of triangulation and validation of theory testing, but in pursuit of adjusting methods to the concrete epistemological challenges posed by different facets of a research question. A key difference from a complementary design, as we understand it, is that the former is more apt for the study of multiple units (e.g. agencies), wherein an overall quantitative pattern may be established, and qualitative research is employed for in depth understanding of mechanisms. Conversely, expansion likely involves deployment of multiple methodological tools for within-case analysis of one, or a small number, of complex cases, to decipher the configurational operation of multiple casual chains and their outcomes. Nesting is less likely to be relevant here, since there is no large N sample of similar cases. Equally, the choice of parallel or sequential research is a question of capacity more than one of inherent design.

Before completion, we should admit that alongside its prospect to generate problem-driven research, to enable the study of complex problems and to invigorate innovation, mixed methods has its prices (Ahmed and Sil, 2002). Incommensurability of logically incomparable results, which is often stated as the peril of mixed methods, is in our opinion, as explained above, a relatively minor concern in public administration. A more serious concern regards the high demands that mixed methods impose upon researchers in terms of expertise. The need to flexibly move between different types of quantitative and qualitative method sets a high bar, and it is likely to be case that the quantitative/qualitative skills of true mixed methods researchers, viewed in isolation, would fail behind those of pure qualitative/qualitative researchers. What this means is that high quality mixed methods research is more likely to involve collaboration between researchers with distinct skills. To a large extent, this is already happening, due to specialization, probably regardless of mixed methods. Nil et al. (2018) found that collaboration

rates, in PAR, amounted to only 10% in the 1940s and increased to 54% by the 2010s. Henriksen (2016) documents a similar trend across the social sciences. Ultimately, unlike Ahmed and Sil (2002) we see the need to combine distinct methodological skills as a challenge to be overcome, rather than a problem.

**Table 1: Aims of Mixed Methods and Procedures**

<b>Type</b>	<b>Concern</b>	<b>Solution</b>	<b>Nested</b>	<b>Sequential</b>
Triangulation	Inference error	Employ different methods to test and validate the same hypotheses	Yes	Yes
Development	Need for innovation	Employ qualitative methods to refine concepts, theory and measurements, and quantitative methods to test them	Optional	Yes
Initiation	Need for innovation	Employ different methods to challenge existing theoretical assumptions	Yes	Yes
Complementarity	Methodological boundaries	Employ quantitative methods to establish empirical regularities, and qualitative methods to account for difficult-to-measure variables and micro-mechanisms	Yes	Optional
Expansion	Methodological boundaries	Employ different methods to different facets of a research question to account for causal multiplicity and complexity	No	Optional

## CONCLUSION

Recent commentators observe that public administration research has, with time, narrowed its gaze from holistic comparison of administrative systems, and their relationship with politics and society, to the inner management of public-sector agencies. It has also been argued that the key journals of public administration are overly representative of US and Western/North-European studies over other parts of the world, and of pure academic scholarship over practitioners' perspectives. Of course, these are crude generalizations, and we can all point to notable exceptions.

The role of methodology as a factor shaping the above trends, whilst not overlooked, received less attention compared with the discursive contest between public management and public administration (Roberts, 2018; but see Moynihan, 2018). This paper proposed that the above trends go hand in hand with the near exclusivity of quantitative over qualitative research within our discipline. Specifically, quantitative methods entail explanation of variation across multiple units of analysis, and thereby disregard for common contextual background. In contemporary public administration research, it is comparison across agencies or individuals, as opposed to national systems, which is mostly in vogue. Consequently, the influence of national-level political, social and cultural factors, the understanding of which calls for historical analysis of change over time and institutionalization processes, are more likely to be left in the background.

Moreover, along the study of agencies and individuals, quantitative analysis tends to favor readily available indices, or, alternatively, development of skeleton, generalizable, scales that may be applied across countries and cultural contexts. This entails huge advantage to research, and researchers, in countries in which high-quality quantitative data is readily available. It also

tends to compel, or allure, us to adopt indices from psychology and organizational behavior, alongside our own established scales (PSM, most notably), and to apply these readymade indices with little adaptation to different national contexts. And last, and arguably most important, quantitative methodology creates physical and discursive barriers between academics and practitioners. The latter's perspectives are mostly sought through structured, validated indices, whereas their voice as research partners and authors has almost vanished from the main journals.

The question, of course, is whether these trends, and their alleged association with the predominance of quantitative methods, are problematic, or just normal manifestations of research professionalization and differentiation between public administration, adjacent academic disciplines and practice. In this paper, I argued that they are indeed concerning. First, if public administration is to be relevant, it needs to address problems, and to provide solutions, that politicians, political activists and/or public administrators would perceive as relevant and valuable. If a significant share of papers, in key public administration journals, are akin to work in business management, devoid of attention to the political nature of public administration and to its societal impact, and if we find that scholars in the US and Asia, for example, tend to ask the same questions and to employ the same indices with little effective account for the change in national context, then the question of relevance cannot be easily dismissed.

Second, the real problems that policymakers face are oftentimes very complex. Consequently, generalizable models, employing reduced indices for independent and dependent variables, capture too little of the real phenomenon to be explained. Hence, we need more case study research, and configurational analysis of cases, as opposed to reductionist regression analysis.

Third, I stressed that research innovation calls for exploratory research to make sense of change and variation of micro mechanisms across administrative settings. In the absence of qualitative research, innovation in public administration is increasingly driven by adoption of existing indices and theories from business management and psychology and their extension to the public sector. This, in turn, reinforces our inattention to context, which is so crucial for our understanding of our subjects of study, and for the significance of our research for these external audiences.

Still, this paper does not purport that qualitative research, alone, is the panacea for the above concerns. Qualitative research has obvious limitations not only in terms of prospects for generalizability, where applicable, but also in terms of difficulty to discern the relative effects of different variables, and in modeling their direct vs. indirect and linear vs. non-linear effects. Consequently, there is much to be gained from combining qualitative and quantitative research methods and from collaboration among quantitative and qualitative researchers.

Building on the expanding literature on mixed methods, this paper espoused a pragmatic approach, according to which empirical researchers should consign conflicts regarding the singularity of reality and our ability to know it to philosophers of science, and concentrate, instead, on addressing the challenges posed by concrete research problems. In other fields of social science, mixed-methods research is already well established, often seen as the gold standard of high-quality research, and it seems that a similar approach is imminent in public administration.

Yet, as elaborated in this paper, mixed-methods research can be designed to serve distinct aims. Among these, triangulation, which is intended to provide more rigorous hypotheses testing by putting them to test through alternative methodological tools has little to offer in response to

the above concerns with the complex nature of real policy problems and the need for theory innovation. More relevant are versions of mixed methods that are focused on exploration (development and initiation), as well as such that seek to transcend the limitations of each type of method (complementarity and expansion), employing quantitative analysis to discern general trends and the relative and mode of effect of different variables, and qualitative methods to capture difficult-to-measure and time-invariant variables, as well as configurational qualitative analysis to analyze multiple causal chains.

Still, even if we accept that mixed-methods and collaboration between qualitative and quantitative researchers, and more dialogue between academics and practitioners, are vital, and looming in public administration, the challenges are significant. A more flexible, context-sensitive, methodological toolkit would, hopefully, broaden our empirical and theoretical horizons and make us better apt to respond to the significant problems in our diverse societies. Yet, one needs to concede that a greater focus on context, and interaction, not to say collaboration, with practitioners carries risks of a-theoretical research studies, with little convergence. Ultimately, a balance is called for between awareness to local problems and their idiosyncratic causes, on the one hand, and decoding similar patterns and micro-mechanisms that nonetheless travel across contexts, on the other.

## **REFERENCES**

- Ahmed, A., & Sil, R. (2012). When Multi-Method Research Subverts Methodological Pluralism—Or, Why We Still Need Single-Method Research. *Perspectives on Politics*, 10(4), 935-953.
- Gerring, J. (2017). Qualitative Methods. *Annual Review of Political Science*, 20, 15-36.

- Gilad, S., & Alon-Barkat, S. (2018). Enhancing Democracy Via Bureaucracy: Senior Managers' Social Identities and Motivation for Policy Change. *Governance*, 31, 359-380.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward A Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274.
- Hendren, K., Luo, Q. E., & Pandey, S. K. (2018). The State of Mixed Methods Research in Public Administration and Public Policy. *Public Administration Review*. ADVANCED ACCESS.
- Honig, D. (2018). Case Study Design and Analysis as a Complementary Empirical Strategy to Econometric Analysis in the Study of Public Agencies: Deploying Mutually Supportive Mixed Methods. *Journal of Public Administration Research and Theory*, ADVANCED ACCESS.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14-26.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward A Definition of Mixed Methods Research. *Journal of Mixed Methods Research*, 1(2), 112-133.
- Leech, N. L., & Onwuegbuzie, A. J. (2009). A Typology of Mixed Methods Research Designs. *Quality & Quantity*, 43(2), 265-275.
- Lieberman, E. S. (2005). Nested Analysis as A Mixed-Method Strategy for Comparative Research. *American Political Science Review*, 99(3), 435-452.
- Mele, V., & Belardinelli, P. (2018). Mixed Methods in Public Administration Research: Selecting, Sequencing, and Connecting. *Journal of Public Administration Research and Theory*, ADVANCED ACCESS.

Milward, B., Jensen, L., Roberts, A., Dussauge-Laguna, M. I., Junjan, V., Torenvlied, R., . . .

Durant, R. (2016). Is Public Management Neglecting the State? *Governance*, 29(3), 311-334.

Morgan, D. L. (2007). Paradigms Lost and Pragmatism Regained: Methodological Implications of Combining Qualitative and Quantitative Methods. *Journal of Mixed Methods Research*, 1(1), 48-76.

Moynihan, D. (2018). A Great Schism Approaching? Towards A Micro and Macro Public Administration. *Journal of Behavioral Public Administration*, 1(1).

Moynihan, D. P. (2017). Commentary: Mapping a More Specialized Public Administration. *Public Administration Review*, 77(4), 512-514.

Ospina, S. M., Esteve, M., & Lee, S. (2018). Assessing Qualitative Studies in Public Administration Research. *Public Administration Review*, 78(4), 593-605.

Pedersen, M. J., Stritch, J. M., & Thuesen, F. (2018). Punishment on the Frontlines of Public Service Delivery: Client Ethnicity and Caseworker Sanctioning Decisions in a Scandinavian Welfare State. *Journal of Public Administration Research and Theory*, 28(3), 339-354.

Riccucci, N. M. (2010). *Public Administration: Traditions of Inquiry and Philosophies of Knowledge*: Georgetown University Press.

Roberts, A. (2017). The Aims of Public Administration: Reviving the Classical View. *Perspectives on Public Management and Governance*, 1(1), 73-85.

Schram, S. F., Soss, J., Fording, R. C., & Houser, L. (2009). Deciding to Discipline: Race, Choice, And Punishment at The Frontlines of Welfare Reform. *American Sociological Review*, 74(3), 398-422.

Seawright, J. (2016). *Multi-Method Social Science: Combining Qualitative and Quantitative Tools*: Cambridge University Press.

Sil, R., & Katzenstein, P. J. (2010). Analytic Eclecticism in The Study of World Politics: Reconfiguring Problems and Mechanisms Across Research Traditions. *Perspectives on Politics*, 8(2), 411-431.

Small, M. L. (2011). How to Conduct A Mixed Methods Study: Recent Trends in A Rapidly Growing Literature. *Annual Review of Sociology*, 37.

Tarrow, S. (2010). Bridging the Quantitative-Qualitative Divide. In H. E. Brady & D. Collier (Eds.), *Rethinking Social Inquiry: Diverse Tools, Shared Standards*: Rowman & Littlefield Publishers.