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Zhiyong Lan and Kathleen K. Anders
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This article offers an empirical articulation of paradigmatic views that guide research in contemporary public administration. Based on the findings, the authors argue that the debate on whether there is an intellectual core in public administration is becoming less relevant. What is more important from this point on is public administration scholars' self-consciousness and better articulation of these existing paradigms. A self-aware normal science practice in public administration offers us a clearer research focus, a sharper sensitivity for recognizing anomalies, and thus a better chance for advancing public administration theories.

A PARADIGMATIC VIEW OF CONTEMPORARY PUBLIC ADMINISTRATION RESEARCH An Empirical Test

ZHIYONG LAN
KATHLEEN K. ANDERS
Arizona State University

An interesting dialogue between two eminent public administration scholars spurred our interests in empirically examining the paradigms that govern contemporary public administration research. In their dialogue, one asked, "How important is it that we have a paradigm to guide research on public management? Are we making progress toward one? And which is the most promising?" The other answered, "Not very, no, and mine" (Rainey, 1994, p. 41). Amidst the humor and lighthearted, if blunt, assertiveness of this exchange lies a genuine concern of today's public

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administration theorists: Given where we already are, how can we further improve public administration research?

For decades, public administration scholars have engaged themselves in discourses of various kinds to search for an intellectual core for the field of public administration (Denhardt, 1981; Fox & Miller, 1995; Goodnow, 1900; Ostrom, 1989; Stillman, 1991; Waldo, 1948/1984, 1968; Wilson, 1887). Some scholars are still troubled by the thought that there is no viable, broad-ranging paradigm to govern public administration research and to replace scientific management and the politics-administration dichotomy (Stillman, 1991, p. 125). In the new millennium, most of the major universities in the United States have public administration programs, and nearly 10,000 students graduate every year from these programs. Yet voices are still heard saying that public administration is not a discipline per se, but a field that is inherently multidisciplinary.

These perceptions are not without legitimate grounds. Public administration has never stopped being a developing field since its first inception as an independent academic program in 1926 at Syracuse University. Unlike more traditional academic disciplines, public administration seemingly lacks a straightforward, easily discernible intellectual core and disciplinary boundary. Scholarly debate on this issue continues on because, as Rainey (1994) notes, "most of us would agree that none of our current approaches clearly deserves dominance" (p. 43). Moreover, he points out, there are difficulties in "imposing a consensus, as well as the dangers of narrow consensus" (p. 43).

Nonetheless, the field has kept growing. Scholars of relevant academic backgrounds have kept flocking together under this academic banner. What is it that has made this possible? What is it that these scholars have in common? To answer these questions, we examined the content of the recent publications of mainstream public administration journals, with the hope that empirical findings could help shed light on our perceptions of, and discourses on, the status of contemporary public administration research.

The research questions addressed include the following: (a) Is there an enduring group of scholars conducting research in the field of public administration? (b) What type of subjects do public administration researchers regularly study? (c) Do researchers have shared epistemological approaches in their studies? (d) What are the primary methods of analysis used in their studies? (e) What are their data sources? And, (f) are there identifiable paradigms shared by these public administration researchers?

THOMAS KUHN AND HIS CONCEPT OF PARADIGMATIC RESEARCH

Thomas Kuhn, one of the best-known historians and philosophers of the history of science in the 20th century ("Thomas Kuhn," 1996), argued that scientific progress is made by way of paradigm shifts—a reconstruction of the prior theory:

A new theory, however special its range of application, is seldom or never just an increment to what is already known. Its assimilation requires the reconstruction of prior theory and the re-evaluation of prior fact, an intrinsically revolutionary process that is seldom completed by a single man and never overnight. (Kuhn, 1970, p. 7)

The sign of the maturity of a field of inquiry is the emergence of a paradigm that guides normal science practice within the field (Kuhn, 1990).

To Kuhn (1970), normal science is research firmly based on one or more past scientific achievements, "achievements that some particular scientific community acknowledges for a time as supplying the foundation for its further practice" (p. 10). These past scientific achievements are what Kuhn refers to as paradigms.

To understand public administration research, an important step is to see whether the field has entered into the stage of paradigmatic research. If we could reveal shared conceptual frameworks that guide public administration research, we would have a chance of better understanding and advancing the field.

Paradigm is a widely used, and perhaps also widely misused, term. Masterman (1970) demonstrated that Kuhn, who brought the concept of paradigm into prominence in his book, *The Structure of Scientific Revolutions* (1970), used the term in 21 distinct senses. Kuhn (1990) himself admitted many years later that although the fundamentals of his viewpoint are unchanged, he did have stylistic inconsistencies in the way he applied the term (pp. 174, 181). These inconsistencies left many second-guessing as to what Kuhn's paradigm really means. To stay as close as possible to Kuhn's original meaning of the proposition, we shall briefly revisit his interpretation of the word *paradigm* before applying it to our study.

Kuhn (1970) discusses the meaning of the term as follows:

Aristotle's *Physica*, Ptolemy's *Almagest*, Newton's *Principia* and *Opticks*, Franklin's *Electricity*, Lavoisier's *Chemistry*, and Lyell's *Geology*—these

and many other works served for a time implicitly to define the legitimate problems and methods of a research field for succeeding generations of practitioners. They were able to do so because they shared two essential characteristics. Their achievement was sufficiently unprecedented to attract an enduring group of adherents away from competing modes of scientific activity. Simultaneously, it was sufficiently open-ended to leave all sorts of problems for the redefined group of practitioners to resolve. Achievements that share these two characteristics I shall henceforth refer to as “paradigms,” a term that relates closely to “normal science.” (p. 10)

Kuhn (1970) explained that a paradigm or a set of paradigms does not have to be entirely inclusive of all the problems and research activities in a scientific field: “There can be a sort of scientific research without paradigms, or at least without any so unequivocal and so binding as the ones named above” (p. 11). In a later passage, he restated this point in discussing the nature of normal science:

These three classes of problems—determination of significant fact, matching of facts with theory, and articulation of that theory—exhaust, I think, the literature of normal science, both empirical and theoretical. They do not, of course, quite exhaust the entire literature of science. There are also extraordinary problems, and it may well be their resolution that makes the scientific enterprise as a whole so particularly worthwhile. (p. 34)

It is, therefore, not necessary that a field has to have a paradigm governing its research, even though “acquisition of a paradigm and of the more esoteric type of research it permits is a sign of maturity in the development of any given scientific field” (p. 11). The argument over whether public administration research has a paradigm is therefore by nature an argument whether public administration as a field of study has gained any degree of maturity.

According to Kuhn (1970), “one of the things a scientific community acquires with a paradigm is a criterion for choosing problems that, while the paradigm is taken for granted, can be assumed to have solutions” (p. 37). However, he adds that “a problem must be characterized by more than an assured solution. There must also be rules that limit both the nature of acceptable solutions and the steps by which they are to be obtained” (1970, p. 38).

Of the numerous interpretations and uses of Kuhn’s paradigm, Kuhn’s explanation of the word *rule* is frequently overlooked. As a result, the meaning of *paradigm* is often confused with what Kuhn has meant by rule, a term he explains as follows:

To solve a jigsaw puzzle is not, for example, “merely to make a picture.” Either a child or a contemporary artist could do that by scattering selected pieces, as abstract shapes, upon some neutral ground. The picture thus produced might be far better, and would certainly be more original, than the one from which the puzzle had been made. Nevertheless, such a picture would not be a solution. To achieve that, all the pieces must be used, their plain sides must be turned down, and they must be interlocked without forcing until no holes remain. Those are among the rules that govern jigsaw-puzzle solutions. . . . Similar sorts of restriction bound the admissible solutions to theoretical problems. (Kuhn, 1970, pp. 38-39)

The strong network of commitments—conceptual, theoretical, instrumental, and methodological—is, according to Kuhn (1970, p. 42), a principle source of the metaphor that relates normal science to puzzle-solving. Yet Kuhn (1970) specifically emphasized “the priority of paradigms” (chap. 5). “The determination of shared paradigms is not, however, the determination of shared rules. That,” he argues, “demands a second step and one of a somewhat different kind” (1970, p. 43).

Scientists can agree that Newton, Lavoisier, Maxwell, or Einstein has produced an apparently permanent solution to a group of outstanding problems and still disagrees, sometimes, without being aware of it, about the particular abstract characteristics that make those solutions permanent. That is, they can agree in their identification of a paradigm without agreeing on, or even attempting to produce, a full interpretation or rationalization of it. Lack of a standard interpretation or of an agreed reduction to rules will not prevent a paradigm from guiding research. Normal science can be determined in part by the direct inspection of paradigms, a process that is often aided by but does not depend on the formulation of rules and assumptions. Indeed, the existence of a paradigm need not even imply that any full set of rules exists (Kuhn, 1970, p. 44).

These extensive quotes from Kuhn can be summarized as follows: (a) The field of science progresses by paradigm shift—a reconstruction of prior theory and knowledge. (b) Paradigms are criteria for identifying legitimate problems and methods of inquiry for a research field. It includes a worldview (constructed theory about how facts should be related) and two basic criteria—it attracts an enduring group of adherents away from competing modes of scientific activity and it is sufficiently open-ended to leave all sorts of problems for the followers to resolve. (c) Paradigms do not have to be entirely inclusive. Competing paradigms can exist within one discipline. Also, not all legitimate research activities within one discipline have to be governed by paradigms. (d) The concept of paradigm is different from the concept of rule. Researchers working under the

guidance of a shared paradigm do not have to always agree with one another on the set of rules that govern their research. Lack of a standard interpretation or of an agreed reduction to rules will not prevent a paradigm from guiding research.

These observations have assured us the following. First, identification of shared paradigms in a scientific field would be beneficial because fact collection and theory articulation can then be more directed. Second, we can afford to tolerate some ambiguities about paradigms as long as Kuhn's two basic criteria for paradigm are met. That is, the previous achievements were sufficiently unprecedented to attract an enduring group of adherents away from competing modes of scientific activity, and were sufficiently open-ended to leave all sorts of problems for the redefined group of practitioners to resolve. Researchers and scholars, therefore, could agree on a chosen paradigm but disagree on the rules used to govern their solution.

Third, multiple (or competing) paradigms could coexist at the same time in an academic discipline (i.e., mechanics and optics in the discipline of physics), as long as they could each attract an enduring group of adherents to conduct research within its defined territory. Fourth, even if we could not find any paradigms governing contemporary public administration research, it does not negate the value of the research conducted in public administration. Paradigmatic research does not exhaust the entire literature of science. There are also extraordinary problems, and it may well be their resolution that makes the scientific enterprise as a whole so particularly worthwhile.

This understanding of Kuhn's theory justifies our interests, as well as that of others, in identifying public administration paradigm(s). It also frees us from the pressure that we must identify some sort of paradigms in our analysis of journal articles to legitimate public administration research.

DATA, METHODS, AND THE MODEL OF ASSESSMENT

The data for this study were collected from all the published articles in eight academic and professional journals for the 3-year period from 1993 through 1995. Though scholars do disagree about which public administration journals are more important, these eight journals are among the highest ranked in public administration by editors and editorial board members in the field (Forrester & Watson, 1994). They are: *Public Admini-*

stration Review (PAR), Administration & Society (A&S), American Review of Public Administration (ARPA), Journal of Public Administration Theory and Research (J-PART), Public Productivity and Management Review (PPMR), Public Budgeting and Finance (PBF), Review of Public Personnel Administration (RPPA), and Journal of Policy Analysis and Management (JPAM). Nonacademically oriented magazines such as *National Civic Review* are not included, not because they make a less valuable contribution to the field, but because the articles published in them are issue/opinion based, generally nonrefereed, and less concerned with the fundamental issues of public administration research.

Although sampling was a possibility and often used in content analysis of journal articles (e.g., D.J. Houston & Delevan, 1994), we decided to examine the full population to avoid the issue of sampling error. Consequently, a total of 634 articles were reviewed. Realizing that a primary problem of content analysis is the issue of construct validity, that is, the accurate and reliable measures of concepts, extra care was taken in the coding of these articles. The primary tactics employed were, as much as possible, to use established categories to enhance face validity and independent coders to cross code on the same content. We used manifest coding methods as much as possible. The titles, the primary research questions, and the abstracts of these published articles were classified according to a prior established, but open-ended, coding scheme. If coders did not feel the title and abstract were explicit enough in meeting the coding criteria, the coding was based on reading the entire article. Book reviews, editorial commentaries, and perspectives were excluded from this study.

Ideally, we would like to leave our categories open and let the articles lead our coding to wherever it needed to be, however, having such a strategy could be more confusing than beneficial. Believing that "truth comes out more easily from errors than from confusion," we started by reviewing the existing literature and using it as a guide to frame our initial categories. The White and Adams book (1994) proved to be an excellent source for articles that previously analyzed public administration research. Especially useful were the papers by White and Adams (1994), Box (1994), Perry and Kraemer (1990), Stallings and Ferris (1988), and D.J. Houston and Delevan (1990). Also, works by Bingham and Bowen (1994), R.P. Houston (1990), and McCurdy (1986) were helpful in evaluating alternative coding categories.

Initially, we were tempted to consider whether the articles reflected a positive, interpretive, or critical approach to public administration.

However, because these approaches cut across all academic disciplines, not just those of our field, we decided instead to begin with the well-recognized "competing approaches to public administration" advanced by Rosenbloom (1983) as our classifications for possible shared conceptual frameworks that may guide research. Rosenbloom identified political, managerial, and judicial as distinctive approaches to public administration, each having its own set of values, methods, and intellectual heritage. To these three approaches, ethical, integrated, and historical classifications were added.

Though we tried to fit the titles and research questions into the defined categories, we did not let the prescribed categories restrict our coding. If a topic or theme could not comfortably fit into the existing categories, new categories were added. The titles and the research questions were identified and typed into a computer database by one coder. But both coders independently coded their own set of variables. These variables were later compared to one another to check the reliability of the coding. The pairs that differed significantly were put into an "other" category. Although we would not argue that our coding is free from any construct validity problems, we do feel that our codings are reasonably sound compared to many other content studies.

Building on established categories used in prior research (D.J. Houston & Delevan, 1994; Perry & Kraemer, 1990), each of the articles was also coded for the following general research characteristics: title and institutional affiliation of the principal author, primary research method and statistical technique(s) used, primary subject area, institutional support, and funding sources.

FINDINGS AND DISCUSSIONS

The first set of analysis involves the identification of the people who conduct research in public administration to see whether the public administration field has an enduring group of researchers. The first three figures are organized to this effect.

As Figure 1 shows, 88.7% of the authors have clearly identified university affiliations. This is an underestimate because there are authors who work as administrators or analysts in university-related research institutes, but did not specifically identify their research institute's affiliation in the author profile for their article. When there was no manifest sign about whether an institute was affiliated with a university, the author of the

article was coded as an employee of a stand-alone research institute. Even so, authors affiliated with organizations other than the universities (e.g., governmental employees, private sector consultants) consisted of no more than 11% of the total. Author profiles in *J-PART* did not provide detailed information on an author's background; therefore, they could not be included in the analysis.

In terms of the university authors' departmental affiliation (see Figure 2), 36% reported that they are affiliated with stand-alone public administration departments or schools, 9.8% are from departments named both political science and public administration, and 4.9% are from departments named as public administration and management or business administration. These three categories consist of 50.7% of all first authors. Just under 20% are from political science departments. A review of the names of the universities shows that these political science departments are usually located in smaller universities or colleges where the institution's size may not permit a stand-alone public administration department.

Interestingly, few authors are affiliated with departments of economics (4.3%) or sociology (0.6%), which are often regarded as cornerstone disciplines of public administration. A number of the authors are from departments that do not use public administration as part of their departmental names (e.g., industrial and organizational policy, geography and urban planning, and employment research). Again, these departments are generally located at smaller schools.

Figure 3 shows that among the authors published in these journals, 75% are university professors (23.4% assistant professors, 17.3% associate professors, and 34.3% full professors). These numbers do not include individuals who report their titles as MPA director, department chair, or director who may also be professors, most likely at a senior rank. The authors using administrative titles were put into a category that included government officials, instructors, consultants, research specialists, and administrators (total 21.6%).¹ Among the first authors, 3.3% are students, most in public administration.

Together, these three figures indicate that public administration research is conducted predominantly by those who work in public administration-related fields in universities. The fact that more than three fourths of the authors are professors and that more than 45% of these professors are at a full professor rank supports the position that public administration, as an area of study, has an enduring group of scholars conducting research in the field.

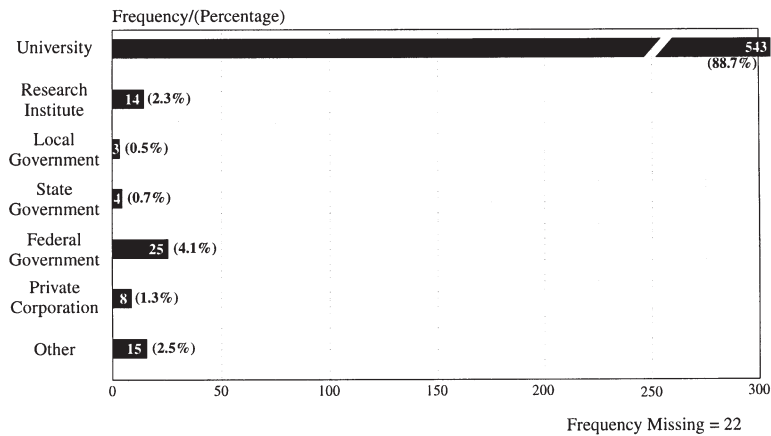


Figure 1: First Author's Organizational Affiliation

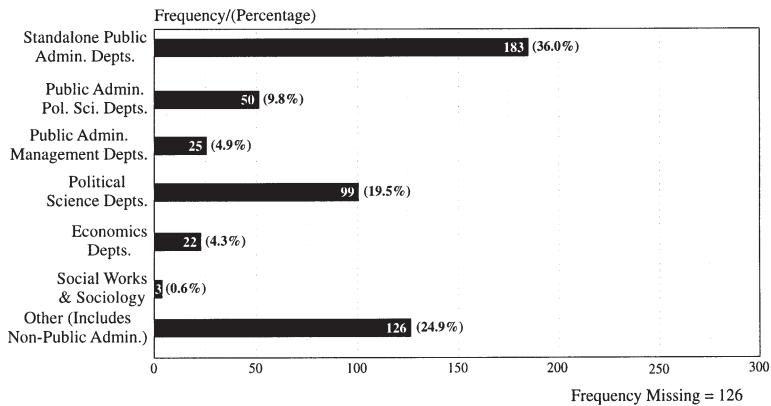


Figure 2: First Author's Departmental Affiliation

The second set of findings tabulates the subjects and the substance of the published research work. As we see in Figure 4, 13.5% of the articles addressed issues related to the federal government, 10.4% to state and local governments, 12.3% to local government issues only, 0.7% to inter-governmental relations, and 34.6% to topics on government in general.

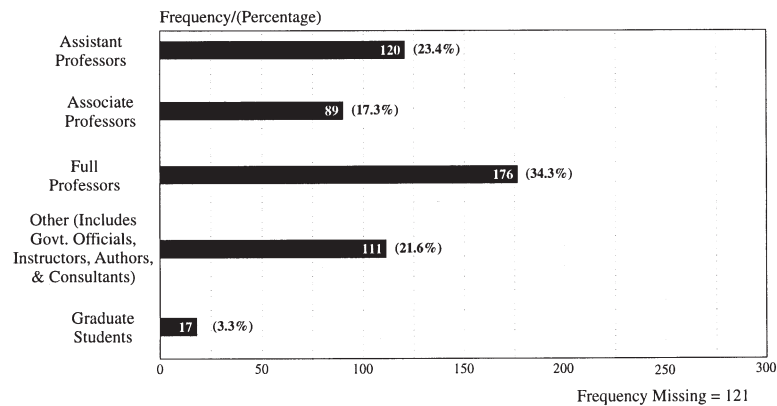


Figure 3: First Author's Position/Rank

These articles add up to 71.5% of the total publications. In sum, the shared theme of these articles or focus of the published research work is government. The balance of the articles, though not about federal, state, and local governments, is about issues in the public sector.

Of the 4.6% of articles on international topics, most examined public administration or government in foreign countries. Intrasectoral articles, which totaled 16.0%, addressed issues of general management and organizations, and a large percentage compared organizations across the public, private, and nonprofit sectors. Articles on private sector management, which are often used to show what public administration can learn from business, consist of only 0.05%. Finally, individual- and community-based studies account for less than 5% of all the articles published.

We also examined the publications of these journals across branches of government (see Figure 5). We found that 35.3% of the articles discuss issues related to the executive branch of the government, 2.8% to the legislative branch, 0.9% to the judicial branch, and 39.7% discuss issues related to government in general. Of the 11.6% of the articles on intersector comparisons, many are public/private comparative studies. This finding reveals a heavy emphasis on the executive branch of the government and on government in general.

Figure 6 presents the frequency of articles addressing the subareas within public administration. For this part of the analysis, we did not include *Public Budgeting and Finance*, *Review of Public Personnel*

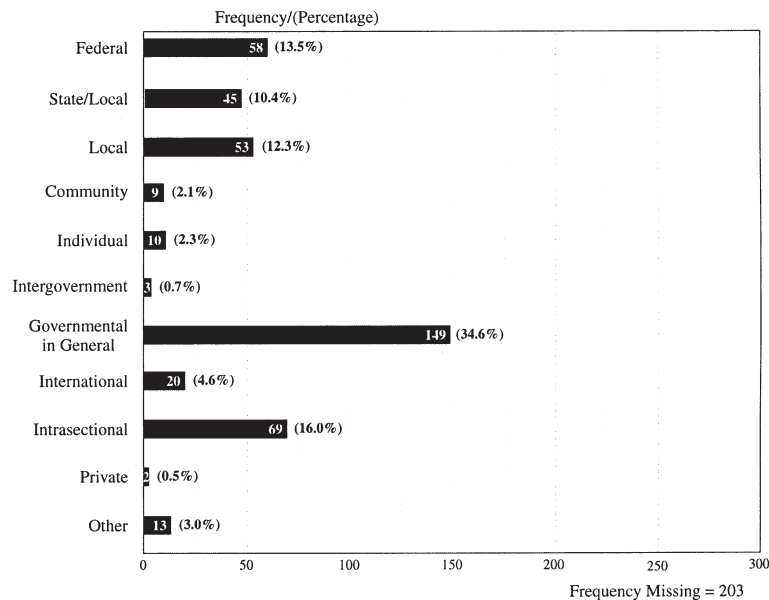


Figure 4: Study Focus: Levels of Government

Administration, and *Journal of Policy Analysis and Management*, because they are known to be devoted to a specific area of study. Of the 431 articles from the remaining five journals (*PAR*, *A&S*, *J-PART*, *ARPA*, and *PPMR*), a large percentage are studies about organizational management and executive roles (30.9%). Other subareas in frequency are personnel management (13.0%), political and legal institutions and processes (11.4%), finance and budgeting (10.2%), administrative theory (8.8%), policy design and analysis (7.4%), social and economic issues (4.2%), refinement of research methods (3.7%), human resources development (3.0%), technology use and management (2.3%), ethics (1.6%), analysis of literature (1.2%), and other areas (2.3%).

In addition to the areas of study, we reviewed the methods of study used in these publications. Figure 7 provides a profile in this regard. Similar reviews of statistical methods have been done for different sets of articles covering different time periods (Perry & Kraemer, 1994; Stallings & Ferris, 1988). As Figure 7 illustrates, almost all social science methods are used.

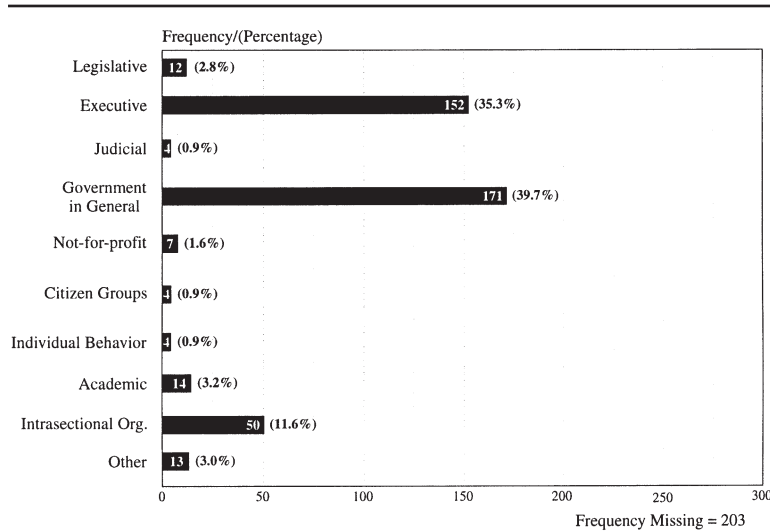


Figure 5: Study Focus: Branch of Government

Among them, two categories, descriptive (15.4%) and intermediate (14.9%) statistical methods, comprise more than 30% of all the methods used.² More advanced statistical methods—such as regression analysis (4.5%), logit analysis (2.7%), time series analysis (4.8%), structural equation (0.8%), and event history analysis (0.3%)—total another 13.1%. Case studies also play an important role in public administration research (25.3%). Ethnographic studies represent 1% of all the studies published. About 30.4% of the articles used methods that are not listed in the ordinary research-methods category. They include methods such as literature reviews, historical accounts, accounts of interviews, and other innovative approaches tailored to the study.

As Figure 8 shows, the debate regarding the predominance of quantitative or qualitative methods in public administration research seems a moot point. Both methods are well represented in these mainstream journals. This suggests that we should move beyond arguments as to which research method is the more legitimate, toward discussions as to whether the methods have been appropriately used.

As discussed earlier, we used the well-recognized “competing approaches to public administration” advanced by Rosenbloom (1983) as an analytical framework to review the published research. In his article,

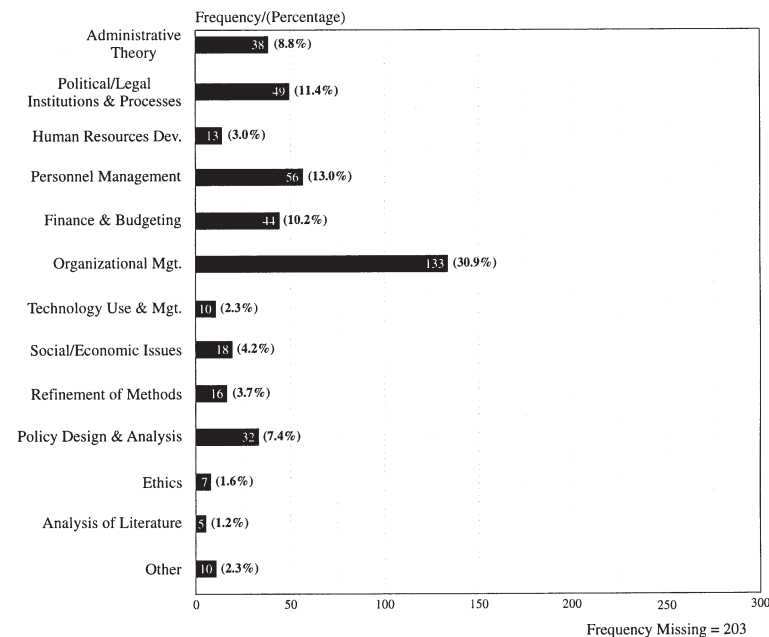


Figure 6: Areas of Public Administration Research

which is now regarded as a classic, Rosenbloom argued that there are three distinctive approaches to public administration: political, managerial, and judicial. Each has its own set of values, methods, and intellectual heritage.

Using a postmodernist lens to view public administration literature, White and Adams (1994) concluded that there are at least six partial narratives "that have been offered up to give meaning to our professional lives" (p. 8). "All rest," they maintain, "on the foundation of the tacit, grand narrative of technical rationality. None adequately embraces the full meaning of the field, yet they all capture some of its essence" (pp. 8-9).

The first of these partial narratives legitimates public administration on the basis of the Constitution; a second addresses the dichotomy between politics and administration; the third reflects the scientific study and practice of public administration; the fourth represents a belief that theory informs practice; the fifth, the Minnowbrook narrative, emphasizes democratic values with common themes of social equity, citizen participation, and proactive government; and the sixth narrative, one that is still

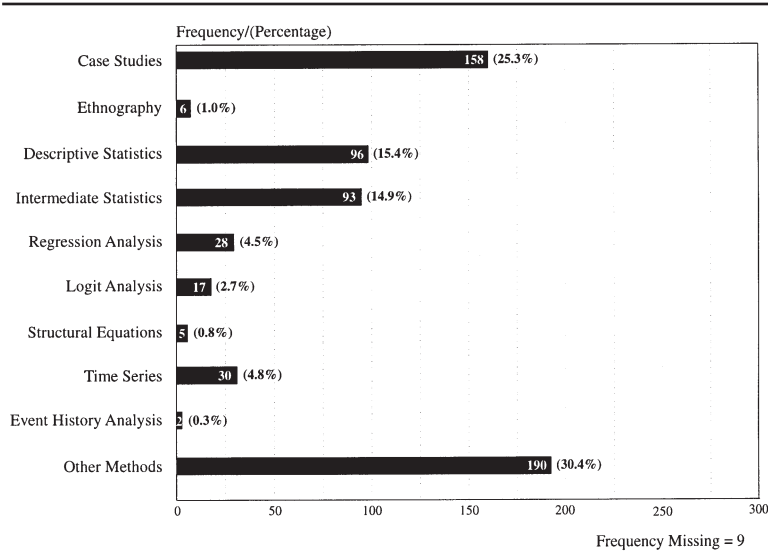


Figure 7: Primary Research Methods Used in Public Administration

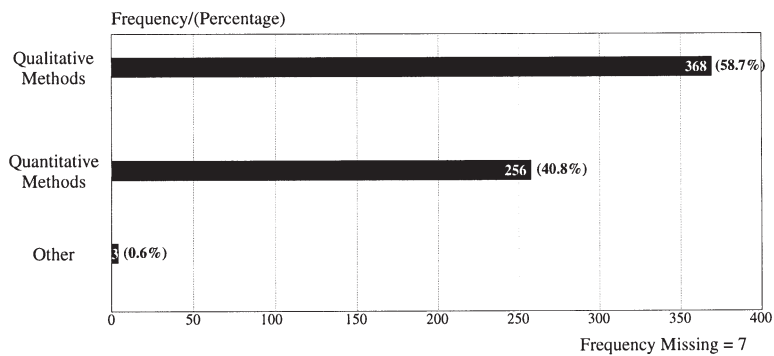


Figure 8: Research Methods Used in Public Administration Research—Qualitative or Quantitative

emerging, examines public administration themes and images using the concept of gender.

The first narrative reflects a legal or judicial approach. The second and the sixth narratives comfortably fit within the political approach toward public administration. The third and the fourth narratives can be considered under the managerial approach, which emphasizes scientific rationality. However, the Minnowbrook narrative requires that another category be added, which we call an ethical approach to public administration. Though the Minnowbrook scholars present a new public administration (e.g., Frederickson, 1971; Marini, 1971) and may conceive this as a comprehensive and not an ethical approach to the field, we find that a careful study of the Minnowbrook literature and the proactive government strategies they propose are underlined by a higher moral order—the ethics of a good government.

When coding the journal articles, it was apparent that some do not frame their argument from a single perspective. Rather, they emphasize a functional government. These researchers examine public administration from McCurdy's (1986) approach, that is, public administration is not just about politics, management, law, or ethics, but governing. This perspective adopts whatever strategies, perceptions, and methods to study and evaluate the government. We put these articles into an integrated/comprehensive category.

As Figure 9 shows, an overwhelming majority of the articles are primarily based on a managerial perspective (52%), 17.6% assume a political perspective, whereas 15.5% reflect an integrated/comprehensive approach to the study of public administration. Only 6% of them approached public administration from the perspective of the rule of law, and 1.6% from the perspective of ethics. The remaining articles (4.2%) used what we considered a historical approach. These are papers written in memory of a prominent individual (usually a scholar) by highlighting his or her eminent contributions to the field.

Perhaps what most perplexes public administration theorists is the wide range of issues covered by public administration literature. We performed a content analysis of the key words from the title or abstract of the 634 articles, but discovered that few patterns exist with regard to the issues addressed. Some issues did appear at higher frequencies than others and are listed in Figure 10.

Another set of analyses looked at the data sources of public administration research. We find that 44.2% of these publications have used existing literature (other than numerical data publications) as the basis of their study. This indicates that researchers in public administration, either by choice or necessity, have not ignored the existing body of literature and

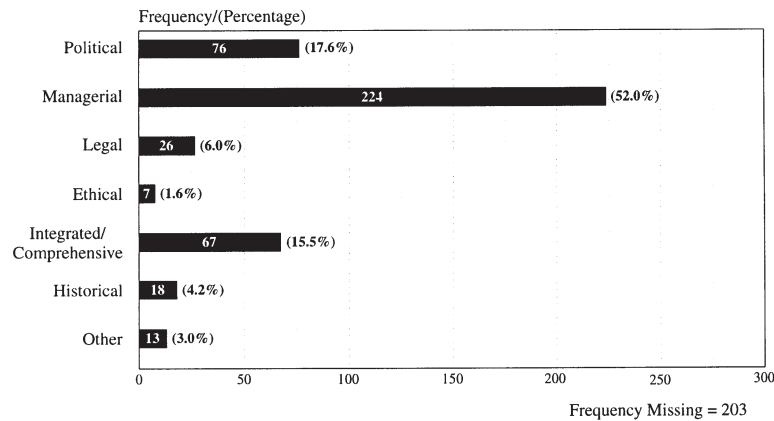


Figure 9: Cognitive Approaches to Public Administration in Public Administration Research

theories. Researchers have also heavily depended on self-collected data (27.1%) and governmental publications (20.6%) for their research. Surprisingly, they do not use census data as much as expected. Also, whereas many private information service publications do exist, it does not seem that public administration researchers use them either. This may be due to the lack of relevance of the data collected by these information sources to public administration research, or because some type of costs are involved.³

Figure 11 indicates that the bulk of the articles (49.4%) are aimed at problem solving. Information sharing comprises 18.1%, and 32.5% are aimed at theory building or theory testing. From this figure, we see that researchers do exhibit a strong research interest in the practice of public administration and undertake studies that are relevant to practitioners.

A PARADIGM QUEST

The preceding analyses have revealed some patterns in public administration research. First, it is clear that public administration research is about government, or the public sector. Topics on private organizations (0.5%), individuals (0.3%), or other nongovernmental issues (3%) comprised a small portion of total publications, and they are only introduced

Frequency 10-20	Frequency Less Than 10
administrative accountability	accounting
administrative reform	AIDs & psych.
administrative discretion	culture
budget reform	criminal justice
civil service reform	communication
citizen participation	conflict resolution
decentralization	cybernetic theory
employee participation	crime rates & incarceration
entrepreneurship	child labor
environmental issues	corruption
implementation	deregulation
fiscal management	gubernatorial elections
minority & women representation	gun control
organizational theory	health care
performance appraisal	higher education
public policy	highway safety
productivity	information technology
reinventing government	juvenile issues
strategic planning	land use
total quality management	leadership
the constitution & public administration	retirement systems
	school district
	social welfare
	urban management

Figure 10: Listing and Frequency of Issues Addressed in Public Administration Research

when relevant to inquiry about the public sector. Moreover, the key words that most frequently appeared in the research (see Figure 10) demonstrate an overwhelming concern for public administration issues.

Using Kuhn's primary criteria for paradigm—one that attracts an enduring group of adherents and has sufficiently open-ended questions left for these adherents to pursue their normal science practice—the field of public administration could claim to have its paradigm. This paradigm asserts that public administration differs from other types of management, private management in particular, in meaningful ways. The objective of the normal science research within this paradigm is to improve public service performance and resolve various problems encountered in public administration practice.

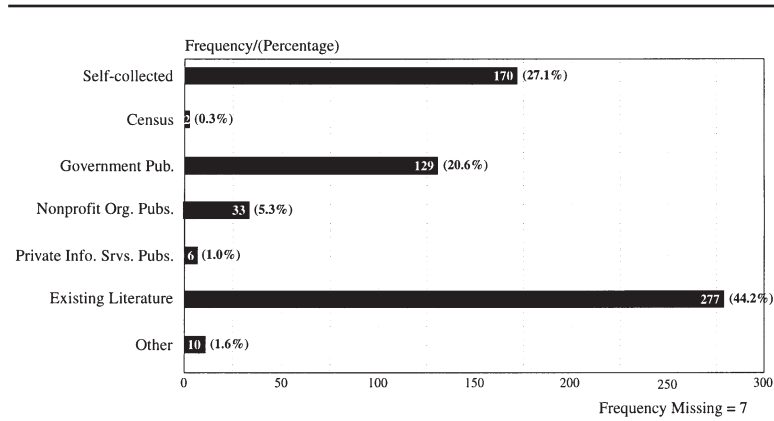


Figure 11: Institutional Support and Data Sources

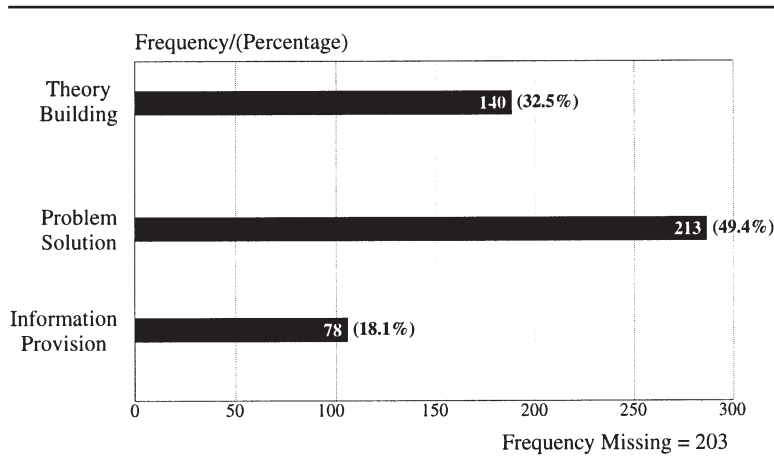


Figure 12: Orientation of Public Administration Research

Some scholars have emphasized a generic view of public administration, arguing that public organizations are not different from private organizations per se (Murray, 1975). Others maintained that public and private organization are by nature different (Allison, 1979). Still others

agreed that there are differences and similarities, but the differences are more important than the similarities (Rainey, 1991). Though the debate has not ended, extensive research about the public sector as a relatively distinctive domain implies a shared recognition that public sector is sufficiently distinct to have its own processes and characteristics that need special attention and a different understanding.

Empirical work has accumulated over the years confirming the behavioral differences between the public and the private sectors (e.g., Bozeman & Scott, 1996; Lan & Rainey, 1992). Wamsley and Zolad (1973) have emphasized the importance of political influence on public organizations. Rainey (1979, 1991) tabulated a list of environmental, internal, and transactional factors that differentiate public and private sectors. Bozeman (1987) proposed a dimensional approach to deal with an ever-blurring public-private boundary in organizational studies. Though these scholars do not always agree on how public and private sectors should be distinguished, they all share the conviction that publicness makes a significant difference and requires special attention for solving its problems and enhancing its performance.

These scholars have accepted the fact that what distinguishes their research from generic administration is the government, or at a more theoretical level, publicness. Analyses of the empirical data here have clearly shown that researchers have been working, consciously or not, within this paradigm. They represent an enduring group of scholars and practitioners who regard improving the performance and solving the problems in the public sector as their legitimate research concerns.

Researchers sharing this publicness paradigm have attained the rank of full professor, senior research specialist, director of institutes and programs, associate professor, and assistant professor. A career path has been established so that followers will continue to join in and devote their time and energy to solving these puzzles in public administration normal-science research. To say that public administration has no paradigm is at minimum overly modest, and at most empirically wrong. Whereas some may still have their individual reservations on whether there is or there should be a paradigm governing public administration research, the data illustrate that the publicness paradigm is one that is currently guiding public administration research.

Under this paramount paradigm, competing approaches exist. These approaches, too, qualify for Kuhn's definition of paradigms. Because these paradigms are conditioned by and identified within the boundary of the major orientation of the field, they may be referred to as the second-tier

paradigms or cognitive approach subparadigms. The paramount paradigm defines the boundary and legitimate issues for the field, whereas the cognitive approach subparadigms define the conceptual, theoretical, and methodological approaches used in the research within the field.

As illustrated in Figure 13, these subparadigms include (a) the political approach, which views public administration issues as policy making, power struggle, and resource allocation among different groups; (b) managerial approach, which regards public administration as an instrument to achieve social and organizational efficiency; (c) the judicial approach, which regards public administration as an instrument in upholding the Constitution and other institutional laws and regulations; (d) the ethical approach, which requires public administration to be cognizant of the consequences of administrative action in terms of its impact on democratic values such as liberty, justice, and human dignity; (e) the integrated/comprehensive approach, which does not specifically identify itself with any of the above approaches but regards public administration as an institution that does whatever necessary to keep the government functioning; and (f) the historical approach, which traces contributions to the theoretical development of the field or to the practice of public administration. Of these, the managerial approach comprises the largest percentage (52%) of the research published in these journals—the political approach (17.6%), historical approach (15.5%), judicial approach (6.8%), integrated approach (4.2%), and ethical approach (1.6%). About 3% of the articles do not comfortably fit into any these subparadigms.

This finding echoes the scholarly dialogue mentioned at the outset of this article that there is not one dominant paradigm that governs research in the field of public administration. However, it also shows that a small number of paradigms are actually at work, consciously or subconsciously, guiding the practice of contemporary public administration research. These paradigms are competing with one another. Each has its own adherents, and each views itself as the more powerful method for providing solutions to public administration problems.

Our analysis has also revealed the degree of emphasis of these articles in distinct areas of public administration. These areas of concentration include organizational studies, budgeting and finance, personnel management, administrative theory, policy analysis, research methods, and information technology management. Each of them emphasizes a different aspect of administrative studies and dictates the research focus of the work. However, although they represent areas having distinctive research topics that a group of scholars may address, unlike Tier 1 and Tier 2 para-

Tier One: The Paramount Paradigm (Publicness)	Assumptions		Unit of Analysis		Problems			
	Public management is different from the management of its private counterparts		The degree of publicness		How to improve the work of the public sector			
Tier Two: Subparadigms (Cognitive Approach)	Managerial Approach (52%)	Political Approach (17.6%)	Judicial Approach (6.0%)	Ethical Approach (1.6%)	Historical/ Perceptual Approach (15.5%)	Integrated Approach (4.2%)	Other (3%)	
	Assumptions	Public admin. is about efficiency, effectiveness, & economy	Public admin. is about who gets what	Public admin. is about legal rights & privileges	Public admin. is about morality & ethics	The past is relevant to today	Public admin. is about a complex process of governing	Pattern unidentified
	Unit of Analysis	Individuals, groups, institutional structure & processes	Individuals, groups, communities, political institutions' structure & processes	Law, regulations, & legal processes	Ethical standards & procedures	Historical literature, individuals & events	Anything relevant to governing	Pattern unidentified
Problems	How to work more efficiently, effectively & economically	How to achieve power & resource allocation	How to settle conflicts & achieve the objectives of law & regulations	The substance & impact of ethics on administration & society	How not to repeat the mistakes of the past	How to understand public admin. in a holistic	Pattern unidentified	
Tier Three: Sub-subparadigms (Areas of Concentration)	Subparadigms	Assumptions		Unit of Analysis		Problems		
	Organizational mgt.	Importance of organizational mgt. in public admin.		Structure & processes		How to make organizations work		
	Personnel mgt.	Importance of personnel mgt. in public admin.		Structure & processes		Personnel processes & outcomes		
	Political & legal institutions & processes	Importance of political & legal institutions & processes in public admin.		Structure & processes		Description & evaluation of the political & legal institutions		
	Finance & budgeting	Importance of finance & budgeting in public admin.		Structure & processes		Budget/finance processes & outcomes		
	Administrative theory	Importance of administrative theory in public admin.		Structure & processes		Legitimacy of public admin.		
	Policy design & analysis	Importance of policy design & analysis in public admin.		Structure & processes		Policy processes & outcomes		
	Social econ. issues	Importance of social econ. issues in public admin.		Structure & processes		Various social & econ. problems		
	Refinement of methods	Importance of method refinement in public admin.		Structure & processes		Better validity & reliability		
Technology use & mgt.	Importance of technology in public admin.		Structure & processes		Harnessing tech. for mgt. purpose			
Other	—		—		—			

Figure 13: Paradigms That Govern Public Administration Research: A Three-Tiered Model

digms described in Figure 13, these areas of concentration do not reflect a comprehensive worldview. They could best be known as the subset of the sub-subparadigms or areas of concentration.

For example, budgeting addresses distinct research questions typically related to the sources and uses of funds. Yet a budgeting perspective does not subsume all public administration problems (e.g., personnel, policy, organizational studies), nor does it provide a general orientation to guide research and analysis in all of these substantive areas. Authors have, however, used managerial (e.g., Osborne & Gaebler, 1992), political (e.g., Wildavsky, 1992), judicial/legal (e.g., Straussman, 1986, 1988), or integrative (e.g., Anders, 1997) approaches to analyze and propose solutions to budgeting questions.

Figure 14 further illustrates the hierarchical relationship of this three-tier model. Each tier in the model governs the tiers below it. The paramount paradigm, publicness, has the conceptual and theoretical understanding that administration in the public sector has sufficiently distinctive processes and characteristics, and thus deserves special attention. The choices of issues and problems of study are all defined by this fundamental understanding. Research work that does not share this conviction rarely appears in these mainstream public administration journals. Although discussions may continue as to whether this is the right paradigm, it is undeniable that this is the dominating paradigm for the field.

The competing paradigms within the paramount paradigm are illustrated in Tier 2. They described the ontological approaches researchers in public administration use in their studies of public administration problems. Each of them has also succeeded in attracting an enduring group of adherents conducting research within their cognitive framework.

The areas comprising the third tier of the model play important roles in defining public administration research. A public administration scholar may conduct research in more than one of these topical areas. However, just as physicists in physics, where there are disciplines governing research in optics, mechanics, and electronics, public administration scholars and practitioners seek to identify their work within recognized areas of concentration.

CONCLUSION AND FUTURE RESEARCH

This study has augmented the empirical literature describing the status of public administration research by offering a paradigmatic framework to

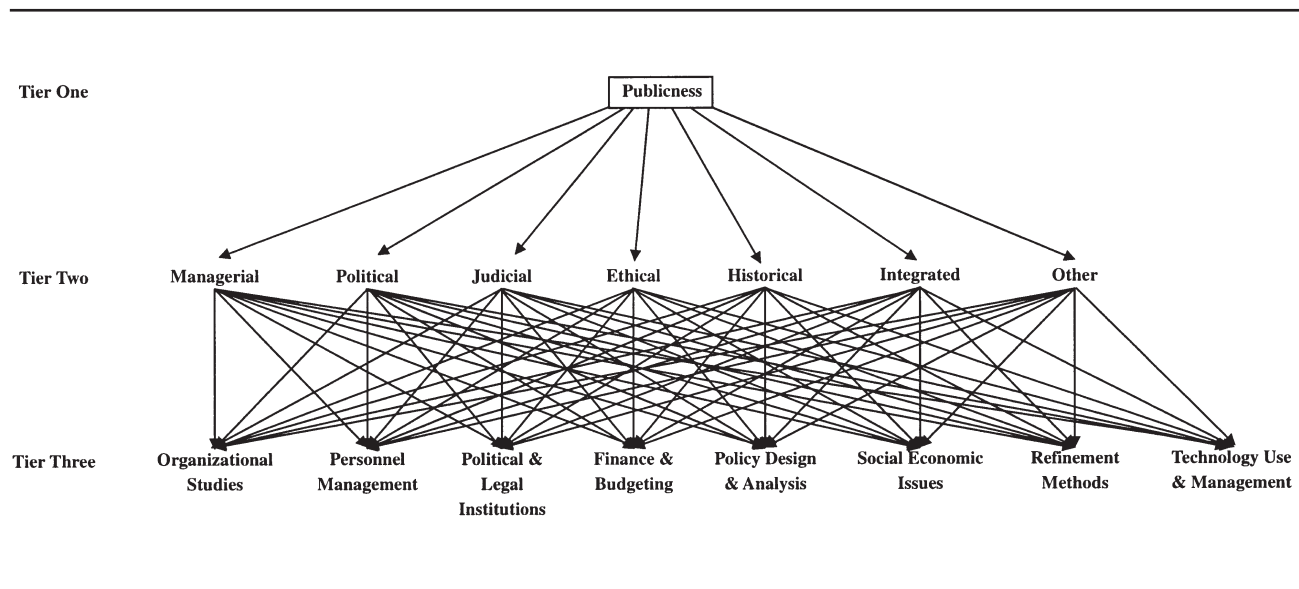


Figure 14: Paradigm Matrix

help public administrators evaluate the field. The findings of this study have revealed a set of tacitly agreed-upon paradigms that guide public administration research. The foremost governing paradigm is publicness. Under this umbrella, a set of subparadigms (approaches) are competing with one another in guiding the inquiries of researchers. Insofar as paradigms have profound conditioning influences on what scholars think, an important step in advancing the conduct of inquiry in public administration is to become conscious of these underlying paradigms that govern knowledge development and research in the field.

In recent years, a group of prominent public administration scholars have called for a more integrated approach toward public administration. They argue that public administration education and research should be concerned with not only how to implement public policy, but also how governance should be structured and operated; not only with professionalism, but also with how to build a supportive environment for maintaining that professionalism (Carrol, 1997; Gawthrop, 1997; Meier, 1997; Sherwood, 1997). Through analysis of a sample of public administration's research output, we have demonstrated that there are traceable patterns of intellectual efforts and heritage in the field of public administration. Making explicit these patterns of research may help public administration researchers better identify their own position in the field and integrate their efforts with others.

Public administration is a dynamic and changing discipline, and "the reality we seek to study is rich, lush, tangled, and intertwined" (Rainey, 1994, p. 43). It is important that researchers place their work within its larger intellectual puzzle map, and hence benefit from the wisdom and hard work of our predecessors and our colleagues. Otherwise, we can easily "wander off and find ourselves unable to communicate" (Rainey, 1994, p. 43).

The findings from this study strongly argue that the debate on whether public administration has an intellectual core is less relevant. What is important from this point on is public administration scholars' awareness and clearer articulation of the methods and intellectual approaches revealed. It could be argued that the existence of competing paradigms in public administration strengthens, instead of erodes, the future of the field. Theoretical breakthroughs (reconstruction of new theories) may come more readily when competitive approaches are allowed to coexist. Moreover, a self-aware normal-science practice offers us a clearer research focus and a better chance for recognizing something new, critical, or unduly overlooked.

NOTES

1. This is done so that measurement reliability, an often-challenged problem in content analysis, is ensured.

2. Intermediate statistics here refer to inferential statistical tests such as *t* tests, comparison of means, simple correlation tests, χ^2 tests, and their related measures of the strength of association tests. They involve more than simple descriptive methods, but not yet regression and other more sophisticated statistical methods.

3. Approximately 85% (531 articles) did not indicate any sources of financial or other institutional support. Of the 15% that indicated support, 3% came from federal and state government agencies. The National Science Foundation provided the highest level of support among all the foundations. Foreign governments supported less than 1% of the research funded. It is possible that authors chose not to acknowledge funding sources. However, we feel it is likely that researchers did not report funding support because there was none. This finding has shown little improvement over what R.P. Houston (1990) reported: "6.5 percent of the public administration research articles reported external funding; another 6.6 percent, university funding" (p. 677). It is also consistent with Perry and Kramer's (1990) finding based on a study of articles published in *Public Administration Review* and *Administration & Society* from 1979 to 1989. They concluded, "Eighty percent of the articles failed to identify any sources of financial or institutional support. Poor reporting, journal policy, or faculty ingratitude does not cause this omission. Instead it is indicative of the low level of such support" (p. 364).

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Zhiyong Lan is an associate professor of public administration at Arizona State University. His research interests include public administration theory, information technology management and policy, and comparative public administration. His work has appeared in books and various public administration and political science journals both domestically and internationally. He is currently working on a book on comparative public administration.

Kathleen K. Anders is a faculty associate of public administration at Arizona State University and a consultant to local governments and nonprofits on the integration of performance measures into managerial and budgetary decision-making. Her research interests include public administration theory and public budgeting and finance. She has worked for more than 15 years in state and local government and has published in a number of journals and government publications. She is currently completing a book on performance-based budgeting.