
PART IV
OTHER PUBLIC PROCUREMENT ISSUES

Chapter 11

THE SCIENCE OF PUBLIC PROCUREMENT MANAGEMENT AND ADMINISTRATION

Benon C. Basheka

INTRODUCTION

That public procurement as a field of academic research and a “lucrative” field of practice has increased over the last 10 years or so is now a matter beyond contention among policy makers and academics in both developed and developing nations. However, there are, in my view, unresolved issues that ought to form a nucleus of intellectual discourse among procurement practitioners if any hope of having a well-founded academic scientific discipline of public procurement management and administration is to have a firm foundation. Academics in both developed and developing countries may have “conceived the discipline but the baby is yet to be born.” We have serious paradigmatic challenges –disagreements on very fundamental issues related to the scientific foundation of a body of knowledge. Lack of an agreed upon locus and focus of public procurement research among the practitioners is too huge a gap to remain unattended to. Collectively, scholars need to move away from the “art” to the “science” of public procurement. Public procurement cannot claim to be a science without firm theoretical knowledge to guide researchers on the appropriate “focus and locus” of its subject matter. Adopting an interdisciplinary and comparative approach in analyzing public procurement systems, the discipline should identify the similarities and differences in procurement policies and practices.

Since the inception of the International Conference in Public Procurement (IPPC) in 2004, there has been a growing interest in matters of public procurement efficiency as reflected by the number and quality of papers presented at conferences. The caliber of

conference participants from both academia and the world of practice across different continents testify to the increased interest in promoting good public procurement systems. Public procurement research now attracts scholars from law, economics, business, engineering, defense, health etc. This shows its interdisciplinary character and richness as well as integrativeness. A science of public procurement must be an integrated science. From another front, the international study group for public procurement (IRSPP) that began in 2003 is well known for its “blend” of public procurement theory and practice. It is a network-based group and a number of academics in both developed and developing countries who are not part of this network are excluded from the deliberations.

Efforts by the Nottingham Public Procurement Group and other professional public procurement associations in various countries should not be forgotten either. Of course the public procurement policy and regulatory bodies in different countries have done commendable jobs in promoting the public procurement function. Nonetheless, whether the increased interest in public procurement research is a sign of the maturing academic discipline remains a different matter altogether. There are still some issues concerning the claim of not only the maturity of the discipline but its scientific potential. Academics have not devoted serious efforts in examining the theoretical bases of the public procurement discipline. Bandenhorst-Weiss, Callender and McGuire (2010) thus suggested that public procurement practitioners have long existed in a quasi-professional field, not a discipline, not a profession and certainly not a trade. Procurement has been perceived as not meriting significant treatment as a topic of interest or study and has persistently been denied attention within public administration courses (Snider & Rendon, 2012). Despite the importance of procurement in practice, the voices of stakeholders such as procurement practitioners are apparently not yet numerous nor strong enough to influence public administration educators to pay much attention.

While examining the value of procurement certification; one of the professional attributes of a discipline, Prier, McCue and Behra (2010) wondered whether public procurement had been born. Bandenhorst-Weiss, Callender and McGuire (2010) used the absence of standards, lack of separation of members and the professional body to deny procurement a place in the home of professional disciplines. They

wrongly use the considerable level of disparity among terms used to describe the profession and its members to conclude that public procurement had been born. This is a charge that would entirely be blamed on the public procurement experts in both developed and developing countries since collectively we have failed to develop a knowledge base of our discipline that could set terms clearly understandable by the procurement fraternity. Those involved in the practice of procurement at whatever level in collaboration with the academics need to agree on what procurement body of knowledge is needed to produce a 21st century procurement manager who has the will and competence to contribute to organisational efficiency.

Public procurement-the acquisition and utilization of goods and services required by government institutions from conceptualization of the need for the product to its utilization and ultimate disposal (Callender & Matthews 2000) is a key function that needs dedicated attention from academics to develop a theoretical framework in which the functions of this critical activity can be discussed. From a democratic point of view, government procurement translates public revenue into goods and services consumed by governments and institutions at various levels to benefit the citizens who in a democracy delegate the powers to political and administrative managers. Due to the suspicion that these officials may misuse their powers, parliaments prescribe procedures designed to assure the public of government's transparency and accountability.

Public administration encompasses a body of knowledge pertaining to the operational processes of the executive functions of government (Hilling, 1966). On its part, public procurement supports all government functions (Coe, 1989; McCue & Gianakis, 2001). If the procurement function fails to deliver quality goods and services in a timely fashion and at an economical price, it is known that the performance of government obviously suffers (Coggburn, 2003). McCue and Pitzer (2000) observed that traditionally public procurement has been organized as a centralized function; an arrangement that resonates with the long perceived central role of the state in society. As early as 124 BC, there was a university in China teaching administration (Simcox, 2010). Moreover, by 2BC, there existed a civil service in China with 15,000 employees. Such a solid number needed a team of administrators who had to be trained in the whole "science" of administration (Holzer & Zhang, 2002).

Public procurement was long regarded as an important component of this “science” of administration. Such a civil service would simply not have worked without supply of various requirements needed by administrators of the time to go about their activities.

Gladden (1972) conceded that administration became a task of an early chief or leader without his knowing and it gradually emerged as a specialized activity with the growth of civilization. It was not until civilization reached an advanced stage of development that much thought began to be given to the art of administering. True to the public procurement function, its recognition has taken time and to date it is still struggling to attain appropriate recognition in the teaching of public administration. Schools and Departments of public administration in Universities in Africa hardly include public procurement as part of the academic curriculum; a problem that goes beyond Africa. There is a noticeable poverty of procurement content and this partly contributes to its eventual neglect in public administration research. Rarely do public administration conferences throughout the world have presentations and discussions on this subject of public procurement. Until not too long ago the subject of public procurement would have received little attention by academic researchers and policy makers, because it was considered an administrative function too mundane to worry about (Wittig, 1999) and has been an academically neglected area of study (Thai, 2001).

Public procurement ought to be divided into two parts, namely (1) the practice, and (2) the academic study. The world of practice and theory should not be too separate. The theoretical part should include the study of the fundamental characteristics of what constitutes public procurement within the context of the changing nature of government. It has to cover all activities which are involved in this function. The theory of public procurement must be concerned with the origin of the function within government. It must cover the theory of legislation for public procurement research and the role of various institutions and actors in that effort. Public procurement function and its relationship with other organizational functions must occupy the theorists. It must understand the theory of procurement in the state. The applied part should embrace the study of the actual work of public procurement at all levels of government – central, federal and district. The study of national and international problems in public procurement in a comparative way needs to be emphasized. The rest

of the paper examines (1) the historical development of public procurement, (2) the normative role of public procurement in a democracy, (3) the scientific potential of public procurement, (4) the methodological approaches that ought to guide public procurement research and (5) finally the concluding remarks.

HISTORICAL EVOLUTION OF PUBLIC PROCUREMENT

The early literature on both public and business administration tended to focus on elimination of abuse, inefficiency, and fraud, in administrative systems. This situation applies within the context of procurement practices since public procurement practices existed in ancient systems. Procurement may not be the oldest profession as it cannot compete with professions like prostitution-the oldest profession. However, procurement's history through the ages is worth telling and academics must combine their sources to build such a solid history. Disciplines worth the salt must know their origin in terms of practices and theory. Accounting, auditing, law, engineering and public administration among others have in their scholarship a documented history of both the practices and theory. Is there any history of Public Procurement; say the practices as well as the academic study agreed upon among public procurement practitioners? Is such a history worth developing by public procurement practitioners and academics? Public procurement is the acquisition by government and if its practices have developed on parallel arc to the literature of public administration as Sementelli (2011) documented, public procurement is an ancient activity. The idea of government and therefore public administration is indeed very ancient. To trace the history of public procurement requires this recognition.

Knowledge of the history is useful in guiding decision making of the future in all fields of human endeavor. Basheka's (2012) contention that history is an important tool for a discipline like public administration, where it ought to be a walking stick, is helpful here. Among the remarkable features for the development of the discipline of public procurement should be to trace its historical trajectory. Indeed, the history of procurement extends several thousand years into the past; a fact that provides a useful theoretical foundation for the subject matter of contemporary public procurement systems. How did ancient governments or administrative systems of various

magnitudes go about the business of acquiring their requirements (goods, services and works) to undertake their numerous functions of the time? The early literature on both public administration and business administration tended to focus on elimination of abuse, inefficiency, and fraud, in the context of procurement practices. This statement suggests, as earlier argued, that the practice of public procurement is older than its academic study.

Civilization and administration have always moved hand in hand (Shafritz et al., 2011). Contextually, the activity of procurement must have equally moved side by side with the journey of administration and civilization. It is inconceivable for any administration to have taken place in ancient times without the activity of procurement. Moreover, as Errigde and McIlroy (2002) rightly demonstrate, governments always use public procurement to undertake public works, build roads, provide health care, and provide education and public order. Hunja (2003) also eloquently nourished this argument by confirming that reducing poverty and attaining health, education and other objectives of government requires getting the best out of the limited funds available for state purchases of goods, services and infrastructure. On this same related subject, Trionfetti (2000), as well as Brulhart and Trionfetti (2004) contended that the long historical role of public procurement in facilitating the running of governments in both developed and developing countries is real. Public procurement must have thus occupied a central place in ancient and medieval periods albeit unrecognized.

Schrouder (2010) helped us trace the journey of public procurement practices through the early days of civilizations of Mesopotamia and Greece. While quoting Pitzer and Thai (2009), she reports that the public procurement practices were from as early as 1778 (two years after Adam Smith's *Wealth of Nations* that appeared in 1776). Writing from an American context, the author suggests further that the United States continental congress became the first to appoint procurement commissaries. A further interrogation of the literature however confirms that the practices of public procurement date much earlier than the 1776 period. History has it on good authority that the Chinese traded with some of the Greeks around 5800 years ago; a practice that involved contracting. Contracting was used in the Roman law and it is stated that while a sale of goods

contract was an easy job, there were problems on when the delivery of either the goods or the payment was delayed (Maine, 1861).

The Egyptians are recognized by existing literature to have had sound systems of what we today call public procurement. In 3000 BC, the pyramid-building Egyptians tracked the supply of building materials and workers on papyrus rolls. While people could have at the time documented that they were undertaking the public procurement function as it is conceived today, the acquisition function and practices constituted an important part of the project manager's job on such huge projects. Tracking the orders and their actual delivery were meticulously followed up by those who had the mandate. There is no way that the massive constructions which took place in the ancient times could have been successful without good systems of public procurement. Callender (2008), in his 12 myths about procurement, correctly challenged the perception that the procurement function was a product of the nineteenth or twentieth century. He reminds his audience of the strong evidence of procurement activities involving China and Greece, parts of Europe and the Middle East regions. For example, Sumerian societies (around 3000 BC) erected sophisticated public buildings where the need to source was generated by demand for glass and other products that were not available locally. Much later, Callender reported that the emergence of Roman law created the notion of obligation between contracting parties and the foundations of agreement, agency, partnership and sale.

Thai (2001) reinforced the conclusion that the history of public procurement is long. While quoting Coe (1989), he referred to a red clay tablet that was found in Syria indicating the earliest procurement order that dates between 2400 and 2800 BC. The order it is reported; was for 50 jars of fragrant smooth oil for 600 small weights in grain. Thai also referred to the development of trade between china and Greek colony in 800 B.C. All the above examples of public procurement practices suggests that the construction industry, the church and the engineering fields would qualify to be regarded as among the early sectors where public procurement practices were in wide usage. The military institution would equally qualify for inclusion among the early practitioners of public procurement practices. Construction, war and courts were the main employers of procurement specialists for most of the antiquity and medieval age.

We acknowledge that public administration involves the delivery of mail, collection of trash and licensing of motor vehicles to the dramatic getting a man to land on the moon, the dispatching of Peace Corps volunteers to scores of countries, and the development and control of energy resources (Fesler, 1980). In all these efforts, the function of procurement has and will at most remain unavoidable.

In 1494, Pacioli invented double-entry book-keeping, an important area of financial management whose jurisdiction is to report financial transactions. Bookkeeping is often understood to mean the recording of financial transactions that include sales, purchases, income, receipts and payments by an individual or organization. Bookkeeping involves making a record of the monies received by a public entity in the context of government as well as the monies paid out. It encompasses money an entity owes to vendors, employees, tax agencies, contractors and any other individual or entity. Since public procurement has always been a big function of any government, the double-entry discovery was a key practice that has significant implications to public procurement. For medieval cities and palaces, the intendant was responsible for securing supply of all goods needed and often one of the most important counselors of the ruling lord. In such times, the supplies had to be recorded as a mechanism of accounting to the authorities.

At the same time Woodrow Wilson published his first publication on public administration, Kirkman (1887) published what is probably the first book on procurement entitled "The Handling of Railway Supplies: Their Purchase and Disposition." The Comptroller of the Chicago and Northwestern Rail road wrote this book exclusively about the purchasing function. For the purpose of our debate, purchasing and procurement will be used interchangeably here. He eloquently discussed the need for technical expertise among purchasing agents, the need to centralize the purchasing department under one individual, and the lack of attention that was often given to the selection of personnel to fill the position of purchasing agent (Monnczka, Trent & Handfield, 1998). Contemporary public procurement systems however prefer a decentralized procurement system as opposed to a centralized one. Harvard University offered a course in purchasing as early as 1917. Purchasing as an academic discipline was furthered with the printing of the first college textbook on the subject, authored by Howard of Harvard in 1933. Early buyers

were responsible for ensuring a reasonable purchase price and maintaining operations (avoiding shutdowns due to stock outs). Subsequent periods saw a proliferation of many articles beyond the rail road sector signifying the recognition of the purchasing function. Many universities equally started offering courses in purchasing. Specific courses on public procurement however remain rare and even the expanded field of public administration largely ignored this important function of government.

W. Willoughby's (1927) book entitled *Principles of Public Administration*, regarded as a second text book of public administration after Leonard D. White's 1926 *Introduction to Public Administration*, is a landmark publication amidst our debate. Some of the ideas set force in Willoughby's piece may no longer be acceptable to many students, yet nowhere else will one find those ideas so carefully expressed (Millet, 1956). Willoughby identified five problem areas for public administration: general administration, organization, personnel, supply and finance. By supply he must have had in mind the field that this paper calls public procurement. The book provided a convenient summary of defects in administrative practices but it was also an expression of desirable practices. Early systems of administration shared one important characteristic. They were personal - based on loyalty to a particular individual such as a king or minister, instead of being impersonal, based on legality as conceived by an organization or the state (Hughes, 2003).

Both World Wars brought more attention to the purchasing profession due to the shortage of materials and the alterations in the market. The Second World War recognized a high point of procurement activities and this recognition often came from the top brass. However, still, up until the 1960s, purchasing agents were basically order-placing clerical personnel serving in a staff-support position. Procurement or purchasing activities were regarded as low value adding activities which never needed any strategic focus. The history of public administration suggests that the 1970s were challenging periods of governments. Before the 1960s, government was regarded as a central pillar of any society, more so in the delivery of essential public services. However, the late 1960s and all the 1970s saw government coming under intense pressure due to being ineffective, inefficient, and largely wasteful. Mismanagement, nepotism, political patronage, large and rigid bureaucracy, and

widespread corruption became common features of public administration machinery (Turner & Hulme, 1997). Public procurement activities must have been regarded with the same suspicion as any other activity of government at the time.

By the 1980s, governments (and academics) were unconvinced that the traditional system of administration provided an effective form of management of their public services, especially when compared to the robust systems used by the private sector. This thinking brought about the need to inject an entrepreneurial spirit in the running of government using techniques and approaches borrowed from business administration. New modes of delivering public services that relied on business-like styles were recommended. Subsequently, governments, particularly those from the west, including the Scandinavian countries, made a comprehensive package of reforms which they regarded as appropriate prescriptions to cure the ills of the public sector. It is within this period that somewhere a managerial approach began (Hughes, 2003); virtually replacing the administrative focus of government. From the 1980s onwards, the state started rolling back in both developed and developing countries for various reasons, and the emphasis shifted from the state and the public sector as engineers of service delivery to the private sector. The public sector was generally “diagnosed” with acute sickness whose symptoms manifested in inefficiency and corruption, among others. Government was a patient and it needed a doctor! With this diagnosis, the experts forcefully argued that the prescriptions had to come from an efficient doctor who was only to be found in the private sector. The prescriptions were very clear: liberalize, privatize and stabilize. This saw a number of public sector reforms including the public financial reforms for which public procurement reforms were a critical component to date.

In most governments, the public procurement function is known to fall under the Ministries of Finance and Economic Development. Today, the practice of public procurement is widely recognized but not its academic study. While practitioners of public procurement now have a clear locus in the government bureaucracy, the scholars still face trenchant challenges. However, public procurement as an academic field of study lacks a known home in most universities. The few public procurement courses remain with no clear home in most universities, unlike other disciplines like law, economics, sociology or

political science. Not only do they lack a universally accepted known home in universities, but they also lack a common methodological agenda for engaging in scientific research. Public Procurement is now a subject claimed by many disciplines. Some of these disciplines have shown open hostility when demands for a separate public procurement discipline of study are made, and yet others have supported the idea. Economics, political science, law, management, business management, project management, supply chain management, marketing, accounting, engineering, psychology, and sociology, among others, have all joined their efforts to research and comment about public procurement.

Moreover, public procurement research lacks interest in mainstream public administration (Snider & Rendon, 2012). In their elaborate article, the authors seriously interrogate why public procurement is not a major topic in public administration programmes. Yet, as postulated by Willoughby's (1927) book, supply and finance were key components of the mighty public administration discipline. What have academics in universities done to reverse this trend, which according to Snider and Rendon (2012), Cooper (1980) as well as MacManus and Watson (1990) respectively had appealed for public administration's attention to the importance of procurement as well as its inclusion in public budgeting and finance courses.

THE NORMATIVE ROLE OF PUBLIC PROCUREMENT IN A DEMOCRACY

Modern public administration is not just about efficiency, but also involves ideas of democratic participation, accountability and empowerment. This means there is a constant tension between two main themes: making government efficient and keeping government accountable (Minogue, 1998). The public sector works within a framework of democratic governance strategy and management; local people exercise their right to determine how and by whom they should be governed through the "ballot box" (Murray, 20082). In turn, those elected not only have a representative advocacy role, but take on the responsibility of being democratically accountable to the electorate for the decisions made "under their watch" (Hill, 1974).

Tanzi's (1997) viewed that since Richard Musgrave wrote his influential "Theory of Public Finance" in 1959, public finance

economists have found useful the distinction between the positive and normative roles of the state is a useful fact for our debate. The normative roles determine guidelines, principles or norms for welfare-enhancing public sector intervention. On this basis, it attempts to define what the government should do to correct market imperfections and to complement the market in other ways to promote and maximize social welfare. On the other hand, the positive role describes and analyses what the government actually does. In an ideal world, the two roles would merge: the ideal and actual roles would become the same because the state would be doing exactly what it is expected to do and all the reforms needed to maximize social welfare would have been carried out. Unfortunately, the two roles tend to diverge, and at times they diverge a great deal. Effective financial management is a critical function of any public administrative system. It is again clear that no activities of government can effectively be conducted without the process of acquiring appropriate quality and quantity goods, and services at the right time.

Democracy has persistently remained an intimate topic of discussion in political science and public administration discourses. However, it may be regarded as the most promiscuous word in public affairs as it is used differently by different people as though it was a "prostitute." Even the worst dictators would say their actions are democratic and their ruthless abuses of human rights are intended to promote democracy! In its originality, democracy relates to the interface between citizens and their governors. Democracy involves putting the interests of citizens at the forefront of making government decisions. Public Procurement; as a public finance function, is a critical expenditure function that has potential to improve public services. Public finance in democratic governments is guided by democratic principles. Its objectives include proper planning and budgeting for expenditure, effective and efficient administration of revenues, proper use of budget resources, effective control of public expenditure, accounting and reporting, and full accountability for all public spending (Kiragu, 1999).

Democracy includes two principles: "citizens being equal before the law and having equal access to power" and the "freedom of the citizens secured by legitimized rights and liberties generally protected by the National Constitution" (Kigongo-Bukenya & Kaddu, 2011).

Characteristic features of democracy include: separation of powers (legislature, executive and judiciary); core freedoms (political expression, freedom of speech and freedom of the press). Others include: political pluralism, fair elections, majority rule, human rights, parliamentary supremacy, etc. Democratic institutions provide a check on governmental power and thereby limit the potential of public officials to amass personal wealth and to carry out unpopular policies. A close analysis of the benchmarks of democracy suggests a close resemblance to the features of good governance, upon which the principles of public procurement are based. There is arguably a symbiotic relationship between democracy and good governance which has implications for public procurement management. Some policies that stimulate growth are often politically popular and more political rights tend to be growth enhancing on this count (Barro, 1996).

Public procurement concerns and objectives are not fundamentally different from concerns of public finance management. The financial procedures demand good procurement procedures; and the finance budget is actually a procurement budget. The effective delivery of public services often requires the coordinated delivery of materials and the like which the state purchasing apparatus must accomplish. It is difficult to imagine how a state can deliver substantial improvements in the wellbeing of its citizens without a public expenditure system that includes effective public procurement policies.

Hughes (2003) had the following important message to our discussion. Governments, he argues, "have a variety of roles and their full scope is not easily measurable. It is no exaggeration to say that the public sector affects the entire economy and society...the public sector has a crucial role to play in determining the standards of living which depend for most people on government services-the quality of schools, hospitals, community care, the environment, public transport, law and order, town planning, and welfare services-at least as much as the quality of consumer goods and services." In my view, it is almost inconceivable to visualize any governments attaining these goals without an effective procurement system. Arising from the principles of democracy, the democratic principles that should guide public financial management emerge. Managing public procurement

following democratic principles requires the full participation of all actors in government.

The legislature, which democratically is the closest institution to the citizens, must have a clear role in public procurement. The executive and its various agencies must have a clearly articulated schedule of responsibilities and so should be the judiciary. On this debate, Pitzer and Thai (2009) suggested that although the procurement structures may differ across governments, the main branches of government have the same important role of ensuring the success of the procurement system in place. The head of state (who is the president or prime minister) has an important role to play in shaping and directing public procurement activities. The executive branch of government must take responsibility for managing procurement personnel, developing appropriate procurement policies and procedures and choosing between in-house services and contracting out. The legislature has its roles. It may assist the executive branch or the legislative branch to formulate the procurement policies and procedures through their decisions. The legislature establishes oversight and accountability committees which ensure that the executive does its procurement function in accordance with the law. The judiciary has a supportive role in as far as its ability to enforce procurement rules and regulations and settling disputes is concerned.

In democracy, the role of the politicians and technical managers or bureaucrats in public procurement must be clear. Since public procurement reforms in many countries result from New Public Management (NPM) doctrines, there has been a tendency to “eject” politicians out of the public procurement processes; and yet the politicians speak for the people and are mandated to ensure that public resources are spent well, including on procurement. However, this assumes that they cherish all the hallmarks of accountable stewardship. The role of politicians in public procurement is not fully understood and is at most always presented in a negative light. Politicians have major responsibilities for strategic procurement management. As guardians of democratic accountability, they should set strategic procurement priorities, ensure that procurement managers have the will and competence to deliver designed procurement strategies, and they should be involved in the performance management of procurement strategy implementation. .

In a democracy, accountability is fundamental principle of public procurement management. Hughes (2003) suggested that any government requires a system of accountability, so that it acts in ways that are broadly approved by the community. Government institutions are created by the public, for the public, and need to be accountable to the public. The relationship between the citizenry and the government can be regarded as a principal-agent one because the citizens (principals) have given their consent to someone else to govern on their behalf (government). The agents need to satisfy the interests of citizens hence the idea of accountability. Historically, citizens did not give their powers easily and insisted that the political or administrative actions of governments be backed by the force of the citizens themselves. Governments achieve this through ensuring that all decisions are soundly based on law and that some particular person is accountable for the actions of government. Following of the procurement rules and regulations is thus a key democratic principle of public procurement administration.

Gildenhuis (1997) made us aware that democratic financial management should be guided by the following principles:

- Reasonableness and equitability;
- Optimal utilization of public resources;
- Participation (direct or indirect);
- Tax consent and reasonable distribution of the tax burden;
- Only collective bodies of elected politicians having the authority to introduce taxes, to collect them and to decide how and on what they shall be spent;
- Responsibility and accountability of the elected officials to the taxpayers;
- Sensitivity and responsiveness;
- Efficient and effective programme execution by the executive;
- Social equity which addresses itself to two important questions, namely: how more and better services can be supplied and how the same quality services can be supplied at a lower cost; and

- Openness which demands that public financial management and administration takes place in public and not under cover of secrecy or so-called confidentiality.

The last principle requires that accounts be given in public of all financial transactions and so is the primary emphasis in public procurement given its known principles of transparency and accountability which too arguably significantly build on democratic principles. The management of “secret funds” without giving public account of the application of such funds is a taboo in a democratic system. The perception that financial management systems in a country are ineffective and expensive has its roots in the operational problems of the systems, especially when systems go against the above democratic principles. Public procurement must be differentiated from private procurements at all times. This differentiation leads us to a conclusion that public procurement should be used to serve the public interest. In this case, the procurement spend must be in accordance with the cherished democratic values citizens attach to the spending of any public money.

Gildenhuis (1997) further explained; and in accordance with our current debate, that academic education in public finance should be aimed at the acquisition of permanent knowledge: knowledge of the basic tenets and normative theories which would result in a more permanent expertise which would in turn ensure efficient and effective financial administration. Such education should be aimed at the development of the top echelons of the public sector that should do the thinking and not the routine functional work. Such people must be thoroughly educated in the philosophy and normative theories of public finance as a science which will enable them to analyze and evaluate existing financial practices, procedures and policies, so that they can change and rectify shortcomings in order to ensure efficient and effective public finance administration. Public financial management ought not to be taught from the technical aspects but from the philosophical foundations. Since public procurement is part of public finance, it ought to adopt the same approach. The teaching of public procurement should aim at imparting permanent knowledge to people who will spend more of their time doing the thinking as opposed to routine operations. This

teaching should have the “democratic principles of public procurement” forming a critical foundation.

Like in public finance where political and public office bearers would most likely say public finance management is the responsibility of the chief financial controller, it is probable in all democracies for such same characters to say that public procurement is a simple task that everybody can do. Experiences in different countries have even seen people still questioning whether in any case public procurement is a profession in its own rights. While this argument holds some truth; especially given the complexity of the procurement processes where different actors are involved, the philosophical questions especially based on the principles of professionalism demand a different approach. To put this plainly, procurement questions are public finance questions in a broader view.

IS PUBLIC PROCUREMENT MANAGEMENT A SCIENCE?

This question does not attract a straight “yes” or “no” answer. Owing to a number of scholars currently working on public procurement research, one would expect a divergence of opinions on whether public procurement is an art, a science or both. Similar debates painfully also arise on whether public procurement can be a discipline or whether it is a profession. Our debate for a science of public procurement will bear fruits if we understand the debates that have been around concerning this same subject in other fields. Basu (1994) contended that the essential characteristics of a science are universal application, predictability of behavior, and the absence of normative (or ethical) value. Unfortunately, he notes, the three features are imperfectly present in public administration. To him, public administration cannot claim to be a science until the following three conditions are fulfilled (1) the place of normative value in public administration should be clearly identified and made clear, and (2) greater understanding should be gained of human nature in the field of public administration. The principles of administration could be derived from a body of cross-cultural studies, thereby making them relatively free from cultural bias.

Veblen (1918) analysis that the careers of natural scientists were more strongly influenced by objective scholarly achievements as compared to the careers of social scientists or humanists, offers an

appropriate framework for our argument. It is obviously clear that public procurement has no place among the natural sciences because of the exactness associated with such disciplines. However, it perfectly fits the description of being a social science since it deals with man and his activities in the running of government. Science traditionally strives to find, systemize and share new knowledge and insights about things that are not obvious. Scientific disciplines, owing to a consensus on the categories of measurement, yield precise measurement of the variations of the variable itself over time and from one environment to another. It therefore becomes easier to formulate hypotheses that will predict the effect of one variable on another. The findings; often expressed in quantitative terms will be relatively easy for replication and can be tested by other researchers in different places at different points in time. Public procurement academics must borrow from economists who have consistently measured societies change over time in terms of GNP, the wealth in terms of per capita income and the essence of all economic substance in terms of some monetary unit of exchange. We need to borrow from a psychologist who can test his hypothesis in a controlled laboratory setting with a relatively small number of subjects (Rode et al., 1983).

Rode et al. (1983) further warned that none of the social sciences, including political science, sociology, psychology, anthropology and economics, can ever hope to attain the scientific status enjoyed by physics, chemistry, geology, physiology, astronomy, or any of other disciplines of the natural sciences. Citizens who insist on certainty in the understanding of their environment are bound to be disappointed as they shift their attention from natural to social phenomena. Scholars of public procurement who want to claim the status of the natural sciences will be disappointed as public procurement often involves the "irrational behavior" of individuals responsible for making public procurement decisions at various levels. However, social sciences; have differences in the scientific potential of their subject matter, the methodologies of their research, and the analytical rigor of their findings. Historically, economics was the first social science, emerging in France and England, after the mid-18th Century. It has made important strides on its scientific ladder. Compared to economics and other social sciences, political science ranks probably among the lowest in terms of scientific potential but most political scientists believe their discipline is more

scientific than history, philosophy, or any of the other disciplines included in the humanities (Rode et al., 1983). Yet, public procurement borrows from philosophy especially on matters of ethics and morality. Public procurement borrows pertinent insights from history especially on the roles of public procurement in government administration. Does this mean that our desire to have a scientific discipline of public procurement will be shattered? Where will a discipline like public procurement be unless these matters are amicably resolved through consensus among advocates of the public procurement discipline?

In our attempt to develop a science of public procurement, Bhagwan and Bhushan (2010) reminded us of the controversy of the public administration-the mother discipline being an art or science which cropped up because, since time immemorial, the word science had been used for only physical sciences like physics, chemistry, biology etc. The characteristics of these sciences came to be regarded as the standard criterion for judging the claims of other subjects that had aspirations of being categorized as sciences. We need to revisit this debate and address any weaknesses that could have given room for this attack. The main characteristics of sciences were considered to be regularity, predictability, absence of normative value, reproducibility and exactness. It was held that social sciences like public administration could not claim to have these characteristics. Within this debate, some scholars argued that public administration was an art, while others maintained that it was a science, and yet there were those who believed that it could be both an art and a science.

Basu (1994) held that public administration lends itself to two meanings: (1) it stands for the activity of administering government business, and (2) it is an academic discipline. Since administration (public and private) mostly consists of a series of acts or is concerned with doing of deeds, then it undoubtedly becomes an art. While quoting Woodrow Wilson, who had coined the "science of administration" concept, Basu noted that public administration is a science as it has certain principles. The existence of a body of principles in a discipline entitles it to claim the status of science. Indeed, if public procurement can prove that it has developed certain principles, it obviously qualifies to be a science. Does it mean that the principles of transparency, accountability, value for money, etc, often

regarded as the principles of have been agreed upon by all practitioners of the field and would make public procurement entitle it to be a science? How were they developed and who developed them? Are they universally accepted principles that they can be relied upon all times in both developed and developed countries to measure procurement decisions? Are they subject to different interpretations by different practitioners of public procurement and do they have the potential to generate controversy?

Science is said to be characterized by precision and predictability. A scientific rule is one that works all the time and, as a matter of fact, rules in science are considered to be so rigid and final that they are not called rules at all but laws (Berkely, 1984). Many of the more scientific aspects of the social sciences similarly deal with expectations that govern only a portion of the elements being scrutinized, not all of them. Administration makes or should make great use of scientific data, laws and theories. The use of mathematics and computer sciences in some aspects of budgeting is a fairly obvious example. The utilization in personal work of somewhat less definitive but nevertheless statistically valid material developed by psychologists is another example. Since administration uses these types of scientific data then it is a science itself.

Public procurement is a system that consists of procurement laws and regulations, procurement organizational structure, procurement processes, procurement methods, procurement techniques and procurement professionalism and workforce (Thai, 2009). An element of publicness – a concept whose understanding provides an important template for our understanding of the field of public procurement must be understood by all advocates. Hughes (2003) concluded that there are several reasons why the public and private sectors are not the same and cannot be the same. First, in a way not characteristic of the private sector, public sector decisions may be coercive. Citizens can be forced to comply with decisions, pay taxes, have their property compulsorily acquired, and are subject to sanctions deriving in the end from the coercive powers of the state. Private enterprises have more freedom to be arbitrary. They can charge different customers different prices, they can refuse to deal with them, and they can ignore normal procedures. Second, the public sector has different forms of accountability from the private sector. While company management is theoretically accountable to

the shareholders, the public employee is accountable to the political leadership, parliaments, and the public and to various parts of the judicial system.

Thirdly, the public service manager must cope with an outside agenda largely set by political leadership. This is different from an organization where the shared motivation at all levels of the organization is to make money. Having a large part of the agenda imposed by politicians reduces the scope of action of a manager. Fourthly, the public sector has inherent difficulties in measuring output or efficiency in production. It lacks “bottom-line” criteria analogous to profit in the private sector. In government, there is rarely agreement on goals or measures of them, nor can it be assumed that everyone in the organization will abide by either. The difficulty of measuring performance in the public sector, whether of individuals, groups or whole organization, permeates management as a whole. Measurements and evaluation are possible in the public sector, but are more difficult and perhaps less meaningful. Finally, the public sector’s sheer size and diversity make any control or coordination difficult. Somehow, governments and their advisors try to coordinate the activities of the largest and most complex part of society’s activities. Coordination must be political and is never easy.

Public policies have to be conducted within the context of the broader goals of government as opposed to the narrow focus of the private sector. According to Sapru (2010) to understand the idea of “public,” people often use words like public interest, public sector, public opinion and public health to describe the “publicness” of something. Public procurement is used to describe its “publicness.” Public policy as a starting point to understanding public procurement relate to those spheres which are labelled public as opposed to those involving “private.” The public dimension comprises all dimensions of human activity regarded as requiring governmental intervention or social regulation. Public policies relate to the broad activities of government. While government spending may be an indicator of the activities of government, governments do more activities.

Public procurement owes its natural operational home from public finance; itself a major sub-disciplines of the broader public administration discipline which is separated from political science. Public administration in this context refers to the total machinery that includes the policies, rules, procedures, systems, organizational

structures and personnel funded by government at any level-central, federal and local levels. The public procurement function is conceived to facilitate this aggregate machinery of government. We recognize the expansion and complexity of its conduct since the 1990s in most governments. This function has been the target of numerous reforms as a strategy for creating its strategic importance and increasing its efficiency to the function of government.

In view of its very nature and the fact that administering is closely associated with leadership and governing, it is not surprising that the view should be widely held that the administrator is born and not made. The question whether administration, including public administration is an art or a science is almost certain to raise a storm of controversy. Although the distinction between an art and a science may all too easily be exaggerated, this is a matter that calls for some consideration. An art presupposes human skills; and although it calls for knowledge, its emphasis is upon practice rather than theory. A science is concerned with trained skill and presupposes knowledge acquired by study. Public administration would pass the test of a science based on this benchmark since it has long involved training skills for the people to work in government. Let us take the debate further based on what has been reported in the literature.

Rode, Anderson, Christol and Greene (1983) developed a template for measuring the scientific potential of a discipline. Their main pre-occupation was to confirm whether political science would be regarded as a discipline. In this paper, this template, as shown in Table 1, has been modified to subject public procurement to a "scientific test." In the original table, the section which was occupied by political science and its sub-disciplines has been replaced with public procurement with its sub-disciplines. Moreover, given that public procurement is yet to develop an agreeable set of sub-activities, as scholars are even yet to agree on the entire spectrum of the discipline of public procurement (focus), the selected functions or activities of public procurement process are used for our debate. The table shows that any discipline can be measured on its scientific nature based on five parameters, namely: (1) its potential for classifying its subject matter into discrete categories, (2) potential for observing and measuring data, (3) potential for replicating experiments, (4) potential for developing theory, and (5) potential for avoiding controversy. Measured against these five parameters, the

disciplines of physics and chemistry are the purest of the sciences as they score an A on all the parameters. Geology and astronomy have a perfect potential for classifying their subject matter into discrete categories but have issues on other aspects. Within the social

TABLE 1
Report Card for Some Academic Disciplines, according to their Scientific Potential

Disciplines	Potential for:				
	Classifying into discrete categories	Observing and measuring data	Replicating experiments	Developing theory	Avoiding controversy
Physics, chemistry	A	A	A	A	A
Geology, astronomy	A	B	C	B	B
Economics, sociology	B	B	C	C	C
Political science	C	C	D	D	D
History, Philosophy	D	D	F	D	F
Public Procurement	A	B	C	A	C
Some Public Procurement "sub disciplines"					
Procurement Planning	A	C	B	A	A
Advertisement	A	A	A	A	D
Specifications	A	A	A	D	F
Evaluation of bids	B	B	B	B	C
Award decision	A	C	B	B	D
Administrative Review	A	C	B	B	C
Contract Management	A	B	C	A	B
Disposal management	C	C	C	C	D
Procurement audit	B	C	D	C	D
Compliance assessment	A	A	A	A	D

sciences, even economics, which often is regarded to be "scientific" based on its models, has issues as indicated, but not as bad a ranking score as that of political science, history and philosophy which are the weakest.

In my view, public procurement has a very high potential of classifying its subject matter into discrete variables (which could

imply simplistically developing a core knowledge area of public procurement management) and developing its own theories. Public procurement may have its biggest weakness in its ability to avoid controversy. Public procurement may have a modest score of B in observing and measuring data but it will not have as good a ranking in replicating experiments unless scholars decide on an agreeable set of measurement scales that would cut across the different countries. While countries differ, for example, geographically and in terms of development, the public procurement structures will almost be the same. Similar functions are performed by parliament, the legislature and the judiciary in both developed and developing countries. Politicians in developing countries and those in the developed countries have similar ambitions and derive their authority from the citizens. Once a consensus is built by public procurement scholars on the appropriate structures and institutional arrangements for managing the public procurement function at various levels of government, a similar consensus should be developed on the functions and a skills set required by a particular level.

There is an urgent need to build consensus on the rules and procedures that must be followed universally for various methods of public procurement in both developed and developing countries. While some slight differences may occur due to budgetary differences, for example, it would be possible to agree on the key steps and ways that a particular method of public procurement ought to take. Scholars and practitioners must agree on administrative review procedures once a procurement decision is challenged. Similar efforts ought to be directed on when and how such an administrative review ought to be made and the key pre-conditions. The developments ought to give firm foundation for developing a theoretical framework for those concerned with teaching and researching on public procurement. Public procurement researchers would study these matters deeply and propose amendments uniformly; and would also suggest conditions when some diversities may be acceptable, and with what levels of margins of error. The problems for managing the entire process of public procurement in different parts of the world have been extensively discussed by policy makers and academics at different fora; although the theoretical foundations and complexity of these challenges continues to deny a full solution to the inefficiencies in the delivery of public services. Serious theoretical issues that ultimately inform the science of a

discipline have remained unanswered with regard to public procurement management and administration. In such a scenario, our claim to have a true science of the discipline remains a mere guess.

At the UNESCO conference held in September 1984, distinguished political scientists from the various parts of the world marked out the subject matter of political science which included: (1) political theory, (2) political institutions, (3) political dynamics, (4) and international relations. Under the first category, the history of political theory and political ideas are studied. The second covers a study of the constitutions, national government, and regional and local government, and public administration, economic and social functions of government and comparative political institutions. The third topic covers political parties, groups and associations, participation of the citizen in government and administration, public opinion etc. The fourth topic deals with international relations. Political science was delimited into four zones (Mahajan, 1988). What lessons do we derive from such a development? Can the international conference in public procurement, which brings together public procurement professionals (practitioners and academic) from all parts of the globe, decide the subject matter of public procurement to guide its intellectual order? Can we have a group of scholars devoting their efforts to developing public procurement theories based on the integrative nature of our discipline?

Can't we have other scholars concerned with understanding public procurement institutions in various parts of the world and developing a universally accepted set of public procurement institutions? Currently, public procurement institutions and structures differ from country to country. Some countries have more procurement institutions than others and yet all countries derive from the same constitutional order – parliament, legislature and executive. What if another group of public procurement scholars directed their research efforts to understanding behavioral aspects that influence public procurement decisions? How do people involved in public procurement decision-making behave when they expect inducements or when they are under constant scrutiny from a well formulated monitoring and evaluation framework? Would it make sense for some scholars with a political science orientation to be concerned with understanding the public procurement systems while borrowing

useful insights from economics, law and sociology? Can economists be charged with describing pertinent issues of public procurement based on their disciplines as lawyers, sociologists, engineers, project management experts, management, marketing, accounting and other disciplines do the same to enable a convergence to one public procurement body of knowledge but borrowing from these other disciplines? How can we tap from the vast experiences of practitioners at various levels of government to develop this knowledge? Should the public procurement knowledge be universal across sectors or we can have knowledge for health, defense, agriculture, mining and oil?

As public procurement scholars, the major criticism for our discipline's lack of scientific potential revolves around our lack of agreement regarding the methods of studying public procurement and the conclusions arrived at; lack of ability to conduct experiments on the behavior of man in the public procurement process yet he keeps changing; and, our lack of continuity in the development of public procurement research. These are issues public procurement professionals could work upon to resolve. Jayapalan (2000) asserted that a science is a systematic study of knowledge. Those who advance that public administration is a science make us believe that there are certain very specific and clear principles on which day-to-day administration of states is being run and managed. They also argue that these principles are very sound and rational and can be obtained as well as considered with uniformity. These thinkers also make us believe that public administration has already contained considerable perfection to claim a place in the family of physical sciences. For them, it has a well-defined field and sufficient data for application to arrive at facts. They also make us believe that there is a fair degree of certainty in the principles of public administration. There are others who believe that public administration is not an exact science but one of the social sciences. Yet another school of thought believes that though public administration is not at present a perfect science, with more researches and available data, the subject is likely to become a perfect science. Another school of thought has bluntly refuted that public administration is a perfect science. Some of the arguments put forth in this regard include (Jayapalan, 2000):

- The data, facts and figures available for carrying out experiments in physical sciences have high degree of uniformity. They hardly

change their character and qualities. Thus, the conclusions derived are uniform, systematic and dependable. On the other hand, public administration deals with human beings who always change. Accordingly, results of public administration can never be accurate as those of physical sciences.

- In physical sciences, agreed principles can possibly be achieved. The scientists can come to certain conclusions which are acceptable to all. On the other hand, with reasonable certainty, it can be said that public administration can never come to an agreed conclusion. Even thinkers on public administration have failed to produce any commonly accepted definition of public administration.
- The results of physical sciences can be studied in absoluteness. Circumstances, environments, working conditions of the people and other similar things have almost no effect on the results of the physical sciences. It is possible to have a uniform theory in physical sciences. On the other hand, the principles of public administration have to be influenced, rather, very largely by circumstances, environments and social conditions of the people. It becomes more or less impossible to have universally applicable uniform results in public administration. One cannot deny the fact that an administrator or a particular policy which might be a success in one part of the country, might altogether be an absolute failure in other parts of the same country
- Like the elements of the physical sciences, it is believed that elements of administrative behavior are rational. But that is not true. There are various factors which are acting and counteracting on human beings and thus making public administration rather inconsistent. Even very many sound principles of public administration prove failures when people begin to act under the influence of fear, punishment, inferiority complex, hopes, convictions and habits. These irrational elements, however, have no place in physical sciences.
- Those who refute the claim of public administration as a science also argue that it is wrong to believe that if public administration is not a science today, at least tomorrow will be. According to these critics, the supporters of the idea believe that public administration is a continuous and regular process of growth.

They forget that the public administrator is always required to work under different times, conditions and circumstances. The experiences gained by him under one set of conditions today, might be a failure under different sets of conditions at the same time or at some other time.

He further suggests that those who advance that public administration is an art argue that to think that only music, dance and drama or painting are covered in the category of art, is only giving it a narrow interpretation. Public administration is not only an art but a fine art. What ought to be the boundaries of public procurement management and administration? John Locke (1632–1704), a British philosopher, while commenting on price theory once remarked, for medium of exchange “money is capable by exchange to procure us the necessaries or conveniences of life.” This is one of the earliest references on the subject of procurement. Our effort should be on how public procurement should be managed or administered; not how it is done as has so far been the focus of almost public procurement research efforts. Are there problems that our previous efforts have not been addressed in our public procurement research? What is the focus and locus of public procurement? What methodological approaches, if any, unite public procurement scholars and practitioners in their endeavor to establish the truth about this subject? Is public procurement research practitioner or scholar oriented, and where will this take us if our claim for a science is to stand? In which part of the public procurement process is we and how will our focus affect the future of our young discipline in terms of scholarly study and practice? Have we taken for granted certain aspects and we have forgotten the basics? How can national and international public procurement policies be developed within the context of public procurement research and discussions? A quick scan of the papers presented at international conferences suggests a tendency to move towards an academic audience yet the practitioners take a sizeable number of conference attendances, at least for the IPPC conferences.

THE INTEGRATIVE NATURE OF PUBLIC PROCUREMENT

Academically, public procurement has been a neglected area of study even though governmental entities and public procurement practitioners have diligently worked its practices (Thai, 2001). Even

where some attempt has been made as Snider (2006) noted, a significant amount of procurement literature reflects concern over perceptions of the field as merely a clerical or tactical function. This literature is generally introspective in that it is produced by members of the procurement community in procurement-related publications, the principal audience of which are the members of that same community. The thrust of this literature is that such perceptions are either correct or detrimental to the field or both. Its perceptions are often that procurement needs to be redefined or recognized as a strategic activity; thereby elevating its members in prestige and importance.

It would be academically irresponsible to outrightly conclude that there are no good pieces of procurement research that have taken a scientific view especially if the template of measurement is the comparative approach and the rigor of the processes. There are also some public procurement courses that have been independently established in some universities. Thai (2010) reported of a Masters of Science Degree in Public Procurement for sustainable development launched in 2006 by the International Training Centre of the International Labor Organization in partnership with the University of Turin in Italy, the Masters Degree in Public Procurement launched in 2007 by the University of Rome and the Certificate programme in Public Procurement at Florida Atlantic University. The development of an academic field of public procurement needs to have a firm theoretical foundation that should have true hallmarks of a science but, of course, not at the heftier status of the natural science but within the expectations associated with the social sciences. There are those empiricists who have made strong suggestions that for something to be scientific, it ought to primarily concern itself with value-free ideas. However, as Sirkin (2006) suggested, although it is probably true that we can never totally eliminate the effects of value and preference, adherence to the scientific method certainly helps minimize these effects and helps keep those effects from clouding our conclusions.

A medical researcher convinced that cigarette smoke harms non-smokers may publish a report citing the evidence from studies showing such harmful effects but ignoring those studies showing no damaging effects. It has also been argued that a fundamental test of the scientific potential of any discipline is its capacity for clearly

classifying its subject matter in terms of discrete and mutually exclusive categories. These categories in turn must readily lend themselves to the construction of variables – any given phenomena that have measurable properties. The more scientific a particular discipline is, the more observable these variables are; the easier it is to measure changes in their properties, the more susceptible the variables are to quantitative measurement, and the better able the researcher is to manipulate the variables in a controlled environment (Rode et al., 1983). In a highly scientific field of study, almost all researchers agree on the appropriate categories for classifying the phenomena they study. The diversity of public procurement research in terms of involving a variety of disciplines is both strength and a weakness. It is a weakness because it has implications on attempts to form a unified body of knowledge for public procurement. It is strength because it gives insights from other disciplines and this should be exploited intelligently to develop an integrated science which borrows from other disciplines while those disciplines maintain their focus.

Sementeli (2011) rightly observed that public procurement tends to rely heavily but not exclusively on the professions of law, economics and in some cases operations management particularly at the micro-level. A potential limitation of existing public procurement research is its tendency to focus on traditional, private-sector procurement aspects as opposed to fully exploring the uniqueness of public procurement (Murray, 2008). Within public procurement research, political scientists may be interested in the political forces that come into play in the process of public procurement. They are concerned with who gets what, when and how and attempt to understand the process issues of government procurement policy-making as opposed to the output – a contract. In public procurement, political scientists will be interested in the internal and external political forces that may influence a procurement decision to award a contract to a particular bidder. Politics here is used in the context that every decision is a political decision that involves the influence of power economic, political, administrative, and technical and information.

Economists are generally concerned with production, consumption and distribution of wealth. They will be concerned with the costs and benefits of using a particular procurement method

compared to other methods. Their concern will be on the costs and benefits of a particular procurement decision and their pre-occupation is not on the process, like the political scientists, but the outcome. They will be concerned as to who will eventually pay the “costs” resulting from a particular procurement decision. There are opportunities and costs which relate to particular procurement decisions and that will be the main pre-occupation of economists. Building mathematical models to predict the outcome of a particular procurement decision in terms of costs and benefits may equally be a major concern of economists.

Lawyers will be concerned with the laws, rules and procedures for public procurement. The legal frameworks which govern the practices of public procurement should occupy the legal professionals interested in public procurement research. They will be concerned with whether a procurement decision was arrived at following the principles and practices set by a country’s procurement law and other related laws set by that government or any other body that has approved jurisdictional rights to do so. To the legal professionals, their pre-occupation is on how all procurement decisions should comply with the laws and possibly the legal implications of a procurement decision to the procuring entity and to government. Public administration experts will most probably be concerned with how a procurement decision will be used to promote efficiency and effectiveness in the running of governmental activities at whatever level. They need to be interested in the extent to which hitches in the procurement processes impair government’s capacity to deliver timely and quality services to the public. On their part, sociologists need to concern themselves on the social forces that influence a procurement decision. Each discipline will therefore have its unique contribution in helping us understand matters of public procurement and developing a public procurement body of knowledge should endeavor to face this reality.

WHAT METHODOLOGICAL APPROACHES OUGHT TO BE USED IN PUBLIC PROCUREMENT RESEARCH?

Methods in this context are used to imply procedures and prescriptions that ought to be applied to find solutions to unresolved public procurement problems which may be theoretical or practical. Social theorists have often talked of inductive and deductive

methods. Social sciences share two common aspects with all sciences. The first is a commitment to scientific method – a series of logical steps that, if followed, help minimize any distortions of facts stemming from the researcher's personal values and beliefs. The second is the use of quantitative techniques, measuring and accounting, for the gathering and analysis of the factual information that is collected (Sirkin, 2006). Public procurement research may have no serious issues with the first method. But trenchant disputes are likely to arise with the second criteria that if rigidly applied will shed off public procurement researchers who have an orientation to the qualitative paradigm. Public procurement research has recently favored the quantification as reflected from the “best paper awards” criteria and the type of scientific papers that often find their way to publication in academic journals.

Public procurement is now claimed by many disciplines; each with its historical orientation of methodology at best. It has become a subject of inquiry in public administration, economics, medical sciences, engineering, project management, finance, education, business administration, management, etc. The mathematisation for example favored by economists and psychologists will be different from an approach taken by anthropologists or sociologists and yet each of these becomes useful in our understanding of social dimensions of public procurement operations. Research on public procurement has tended to be heavily influenced by the disciplinary backgrounds of writers. There remains an uneasy tension in finding appropriate theoretical frameworks for researching and studying public procurement. While research on the practice of public procurement has grown in volume and focus, research on the theory or the science of public procurement is non-existent.

Cresswell (2009) argued that within the social sciences (if we are to accept that public procurement belongs to this family), qualitative research and the approaches it follows provide a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. He adds that the process of research involves emerging questions and procedures, data collected typically in the participant's settings, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. The final written report has a flexible structure. Unlike objects in nature, humans are self-

aware beings who confer sense and purposes on what they do. We cannot even describe social life accurately unless we first accurately grasp the concepts that people apply in their behavior (Giddens, 1997).

Public procurement may have some good claims to be a science. At least, its scholars agree with minor variations, if any, that procurement is a process, and when followed within certain "principles," an award of a contract to the best evaluated bidder is the sole outcome. Scholars have also developed a consensus on the meaning (but not the scope) of public procurement which is about acquisition of supplies, services and works. There is also now some degree of consensus that the public procurement function is an important strategic function for the performance of governments; though similar consensus is there on the fact that this function is subject to abuse through corruption and fraud. This is an important opportunity that must be exploited in our struggle to develop a scientific discipline. However, there are some unanswered questions particularly as regards the theoretical foundation of the discipline of public procurement. First, what should be the normative role of public procurement in a democratic government? Second, is public procurement an art, a science or both? Third, what ought to be the natural home (locus) of the study of public procurement within universities owing to its interdisciplinary focus? The home of any discipline gives it orientation, focus and academic rigor.

The fourth issue relates to the focus of public procurement research. What key common variables should guide public procurement research and what measurements should be commonly used by procurement researchers to achieve this endeavor? Should public procurement research be academically oriented or practitioner oriented? To what extent can we endeavor to make the study and practice of public procurement scientific? Should public procurement be regarded as an integrative science? The fifth issue which is closely linked to the above questions relates to the methodological and ontological questions. What should be the appropriate unifying research methodology for public procurement research? What theories ought to guide the process of hypotheses development and testing in public procurement research? Should public procurement research take a qualitative, quantitative or mixed methods approach, and what scientific rigor should both practitioners and scholars get

involved in while conducting the research? Should public procurement research be comparative or should it be country-focused? How do we control individual behavior biases from influencing the research outcomes? Any attempt to develop a full discipline of public procurement will be hollow unless public procurement professionals and practitioners engage in constructive scholarly debates to answer these questions.

Sirkin (2006) suggested that when we focus on empirical knowledge, we concern ourselves with knowledge based on observation and experimentation. To the extent that we are engaged in discovering and categorizing such empirical knowledge, we are being scientists, he remarks. He further helps us to appreciate that scientists are “those engaged in collecting and interpreting empirical information. They do so to formulate and test hypotheses-statements positing possible relationships or associations among the phenomenon being studied” (p. 5). These relationships suggest that when some attribute or quantity of one phenomenon exists, a specific attribute or quantity of another phenomenon is also likely to occur. He notes that because communications, cultural anthropology, political science, psychology, social work and sociology, among other discipline concern themselves with aspects of societies, they are often termed the social sciences. They empirically study the social phenomenon. Their goals are to formulate and test hypotheses or suppositions about relationships and possible causes and effects among various aspects of a society, a culture, or a political system. Where does this classification place our dear public procurement?

Sirkin (2006) further reminded us that the scientific method is really a series of intellectual steps. It is not so much the actual techniques whereby the research is performed as it is the thought process whereby hypotheses are formed, tested, verified (or not verified). If followed, the scientific method provides a basis for acquiring knowledge that eventually will be accepted by the scientific community. This accepted “truth” would be independent of the values and preferences of the researcher or any other observer. Khan (2008) is one of the scholars that support the idea that public administration is both an art and a science. He argues that it can be regarded as a science because it is a systematic study. It makes broad-based generalizations about administration than can be subject to verification. A science is often thought of as being a

coherent body of thought about a topic, over which there is broad consensus among its practitioners (May, 2001). This definition has some sense for public procurement. We implicitly have an unwritten consensus on the public procurement process. We seem to generally have a consensus on the categories of procurement – services, goods and supplies. Public procurement practitioners have a consensus on the meaning of public procurement itself. Public procurement is what practitioners and researchers do all day. There are public procurement practitioners and public procurement theorists.

A scan of the existing public procurement strategy and management research methodology literature reveals that key informants, almost without exception, are procurement professionals – there appears to be little triangulation of other actors' perceptions, particularly those of politicians. One potential limitation of existing public procurement research methods is, therefore, that it suffers from a built-in bias as a result of reliance on a single group of key respondents, procurement managers, without triangulating the views of politicians (Murray, 2008). In his study, Murray (2008) concluded that to improve the validity of public procurement strategy and management research, there is a need to be more critical of potential responses from procurement managers and look for triangulation from other actors, particularly those of the respective politicians. Indeed, there is a need for more research on politicians' perspectives on public procurement. Given the above, research would be of benefit if it answered the following research questions: Do democratically elected public representatives believe that procurement is not a political tool? Is procurement politically maximizing its contribution? Is public procurement an underused political tool? What are the actual views of procurement managers with regard to the leadership of politicians in procurement strategy? Is there a difference between the procurement strategies of the political left or right?

There is no harm in using sociological, economic or anthropological methods in public procurement research as long as the primary interest is to discover the truth and bring more intellectual order in public procurement. The emergence of different schools of thought like behaviorism, etc. implies a need for public procurement study to appreciate these developments. May (2001, p. 9), while defending the use of comparative research approach, suggested that “the results of research using cross-national studies

can be found in books and journals of sociology, politics, human geography, social research, history, economics, social policy, anthropology, and business studies.” With this declaration, our hopes of engaging in a science of public procurement based on a comparative approach are supported.

CONCLUSION

This paper advocates for a science of public management and administration. Public procurement cannot claim to be a science without firm theoretical knowledge that ought to guide researchers on the appropriate “focus and locus” for both the study and practice. Grand theorization devoid of practical application will be unwelcome in this new science of public procurement management and administration. The science advocated for must teach the art of seeing the relationship between cause and effect, the art of relating principles to theory and theory to practice. The practice should apply to the whole province of government, whether at the central, federal or local government levels, as the function is critical everywhere. The science advocated for must from inception begin with comparative approaches and should be informed by both qualitative and quantitative traditions of reasoning and should focus on the unit of analysis of government in terms of institutions, structures, processes, behaviors and value systems that border on the huge province of morality.

The discipline of public procurement should give permanent knowledge to the students of public procurement. It is not the models that will make public procurement scientific. Not even the quantification of procurement research and heavy reliance on advanced statistical techniques will make us scientific. In my view, we need to take a disciplined approach. We need to agree on what kind of variables we should be studying, the methodologies to use and then we start building our own theories to explain the world of practice rather than entirely relying on theories developed by other disciplines. There are critical areas for public procurement research and study. For example, what should be the democratic principles for public procurement management? What organizational rules and procedures need to be put in place for public procurement in a democratic government? What should be the link between public procurement and other objectives of government in a democracy?

What should be the degree of citizen voice and participation in public procurement management? Should there be any role by politicians in public procurement management given their inherent duty in enhancing democracy? What accountability mechanisms need to be put in place to ensure good public procurement? What procurement systems do we wish to see in our countries and how can public procurement research contribute to their attainment? At the moment, serious efforts are being directed at studying it, doing it, and exporting it – whatever it might be. This is an approach that was applied in the social sciences which had a lively adolescent debate in the 1950s, as Waldo asserted. Defining the subject was less of an issue. The definitional issues seem to have been resolved to a large extent. But is public procurement a science, an art or both? There is need to shape the knowledge of the science of public procurement.

REFERENCES

- Basheka, B.C. (2012). "The Paradigms of Public Administration Re-Examined: A Reflection." *Journal of Public Administration*, 47 (1):8-25.
- Badenhorst-Weiss, J, Callender, G. & McGuire, J. (2010). "Building the Procurement Profession: A Comparative Review." *Journal of Contemporary Issues in Business and Government*, 16: 69-94.
- Barro, R. J (1996). "Democracy and Growth." *Journal of Economic Growth*, 1: 1-27.
- Basu, R. (1994). *Public Administration, Concepts and Theories*. New Delhi, India: Sterling Publishers Ltd.
- Berkley, G.E. (1984). *Craft of Public Administration*. London, UK: McGraw Hill.
- Bhagwan, V., & Bhushan, V. (2010). *Public Administration*. New Delhi, India: Lotus Press.
- Brulhart, M., & Trionfetti, F. (2004). "Public Expenditure and International Specialization." *European Economic Review*, 48: 851-991
- Callendar, G. & Mathews, D. (2000). "Government Purchasing: An Evolving Profession?" *Journal of Public Budgeting, Accounting & Financial Management*, 12(2): 272-290.

- Callender, G. (2008). "Procurement Professionalism: A global Perspective." Paper presented at the Kenya Institute of Supply Management Annual Conference, September 21-23, 2011, Mombasa, Kenya
- Choi, J.W. (2010). "A Study of The Role of Public Procurement – Can Public Procurement Make Society Better?" Paper Presented at the 4th International Public Procurement Conference in South Korea. [Online]. Available at <http://www.ippa.org/IPPC4/Proceedings/13ProcurementPreferences/Paper13-4.pdf>.
- Coe, C.K. (1989). *Public Financial Management*. Englewood Cliffs, NJ: Prentice-Hall.
- Coggburn, J.D. (2003). "Exploring Differences in the American States' Procurement Practices." *Journal of Public Procurement*, 3 (1): 3-28.
- Cresswell, J.W. (2009). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (3rd ed.). Singapore: Sage Publications.
- Dahl, R. A. (1947). "The Science of Public Administration: Three Problems." *Public Administration Review*, 7: 1-11.
- Errigde, A. & Mclroy, J. (2002). "Public Procurement and Supply Management Strategies." *Public policy and administration*, 17 (1): 52-71
- Fesler, W.J. (1980). *Public Administration: Theory and Practice*. Englewood Cliff, NJ: Prentice Hall.
- Giddens, A. (1997). *Sociology* (3rd ed.). Cambridge, UK: Polity.
- Gildenhuis, J. S. H. (1997). *Public Financial Management*. Pretoria, South Africa: J.L. Van Schaik
- Gladden, E. N. (1972). *A History of Public Administration*. London, UK: Frank Cass.
- Hill, D. M. (1974). *Democratic Theory and Local Government*. London, UK: Allen and Unwin.
- Hilling, H.C. (1966). "Public Administration: Study, Practice, Profession." *Public Administration Review*, 26 (4): 320-328.

- Holzer, M. & Zhang, M. (2002). "Introduction." *Chinese Public Administration Review*, 1 (1): 1-8.
- Hughes, O.E. (2003). *Public Management and Administration: An Introduction* (3rd ed.). New York: Palgrave-Macmillan.
- Hunja, R. (2003) "Obstacles to Public Procurement Reform in Developing Countries", In S. Arrowsmith and M. Trybus (Eds.), *Public Procurement: the Continuing Revolution* (pp. 13-22). Dordrecht, The Netherlands: Kluwer Law International.
- Jayapalan, N. (2000). *Public Administration*. New Delhi, India: Atlantic Publishers and Distributors.
- Khan, A.H. (2008). *An Introduction to Public Administration*. Lanham, MD: University Press of America, Inc
- Kirkman, M.M. (1887). *The Handling of Railway Supplies. Their Purchase and Disposition*. Chicago, IL: C.N. Trivess.
- MacManus, S.A., & Watson, S.A. (1990). "Procurement Policy: The Missing Element in Financial Management Education." *International Journal of Public Administration*, 13 (1&2):155-179.
- Mahajan, V.D. (1988). *Political Theory* (4th ed.). New Delhi, India: S. Chand and Company Ltd.
- May, T. (2001). *Social Research: Issues, Methods and Process* (3rd ed.). New York: Mc-Graw Hill.
- McCue, C.P., & Pitzer, J.T. (2000). "Centralized vs. Decentralized Purchasing: Current Trends in Governmental Procurement Practices." *Journal of Public Budgeting, Accounting, & Financial Management*, 12 (3):400-420.
- McCue, C.P., & Gianakis, G.A. (2001). "Public Purchasing: Who's Minding the Store?" *Journal of Public Procurement*, 1 (1):71-95.
- Minogue, M. (1998). "Changing the State: Concepts and Practice in the Reform of the Public Sector." In M. Minogue, C. Ploidano, & D. Hulme (Eds.), *Beyond the New Public Management: Changing Ideas and Practices in Governance* (pp. 20-35). Cheltenham, UK: Edward Elgar.

- Monczka, R., Trent, R., & Handfield, R. (1998). *Purchasing and Supply chain Management*. Cincinnati, OH: South Western College Publishing.
- Murray, J.G. (1999). "Local Government Demands More from Purchasing." *European Journal of Purchasing and Supply Management*, 5 (1): 33-42
- Murray, J.G. (2007). "Strategic Procurement in UK Local Government: The Role of Elected Members." *Journal of Public Procurement*, 7 (2): 194- 212.
- Murray, J.G. (2008). "Improving the Validity of Public Procurement Research." Paper Presented at the 3rd International Public Procurement Conference Proceedings August 28-30. [Online]. Available at <http://www.ippa.org/IPPC3/Proceedings/Chapter%201.pdf>
- Pauw, J.C. (2001), "The Concept of Public Administration." In J.S. Wessels & J.C. Pauw (Eds.). *Reflective Public Administration. Views from the South* (pp. 333-355). Cape Town, South Africa: Oxford University Press.
- Pitzer, J. T., & Thai, K. V. (2009). *Introduction to Public Procurement*. Herndon, VA: National Institute of Governmental Purchasing. Inc
- Prier, E., McCue, C., & Behara, R. (2010). "The value of certification in public procurement: the birth of a profession?" *Journal of Public Procurement*, 10 (4):512-40.
- Rode, C.C., Anderson, J.T., Christol, Q.C., & Greene, H.T. (1983). *Introduction to Political Science* (4th ed.). Singapore: McGraw-Hill.
- Sapru, R.K. (2010). *Public Policy: An Art and Craft of Policy Analysis*. New Delhi, India: PHI.
- Schrouder, S. (2010). "Public Procurement in the Caribbean: Confronting the Challenges and Opportunities." Paper Presented at the 4th International Public Procurement Conference. [Online]. Available at <http://www.ippa.org/IPPC4/Proceedings/01ComparativeProcurement/Paper1-5.pdf>.
- Sementelli, A. (2011). "Public Procurement: Political Spectacles and Ritual." In K. V. Thai (Ed.). *Towards New Horizons in Public Procurement* (pp. 42-59). Boca Raton, FL: PrAcademics Press.

- Shafritz, J.M., Rusell, E.W., & Borick, C.P. (2011). *Introducing Public Administration* (7th ed.). London, UK: Pearson.
- Simcox, J.E. (2010). *Primitive Civilization or Outlines of the History of the Ownership in Archaic Communities*. Cambridge, UK: Cambridge University Press
- Sirkin, M.R. (2006). *Statistics for Social Sciences* (3rd ed.). New Delhi, India: Sage Publications.
- Snider, F.K. (2006). "Procurement Leadership: From Means to Ends." *Journal of Public Procurement*, 6 (3): 274-294.
- Snider, K.F., & Rendon, G. R. (2012). "Public Procurement: Public Administration and Public Service Perspectives." *Journal of Public Affairs Education*: 18(2): 327-348
- Tanzi, V. (1997). "The Changing role of the state in the Economy: A Historical Perspective." (IMF Working Paper). Washington, DC: International Monetary Fund.
- Thai, K. V. (2001). "Public Procurement Re-examined." *Journal of Public Procurement*, 1 (1): 9-50.
- Thai, K. V. (Ed.). (2009). "International Public Procurement: Concepts and Practices." In K. V. Thai (Ed.), *International Handbook on Public Procurement*. (pp. 1-23). Boca Raton, FL: CRC Press.
- Thai, K.V., & Grimm, R. (2000). "Government Procurement: Past and Current Developments." *Journal of Public Budgeting, Accounting, & Financial Management*, 12 (2): 231-247.
- Trionfetti, F. (2000). "Discriminatory Public Procurement and International Trade." *World Economy*, 23: 57-76
- Turner, M., & Hulme, D. (1997). *Governance, Administration and Development: Making the State Work*. Basingstoke, UK: Macmillan Press.
- Veblen, T. (1918). *The Higher Learning in America*. New York: Sagamore
- Willoughby, W. F. (1927). *Principles of Public Administration*. Baltimore, MD: Johns Hopkins Press.
- White, L.D. (1926). *Introduction to the Study of Public Administration*, London, UK: Macmillan Press.

Wittig, W. A. (1998). "Building Value through Procurement: A Focus on Africa." Paper Presented to the 9th International Anti-Corruption Conference. [Online]. Available at www.legacy.transparency.org.

Woodrow, W. (1887). "The Study of Administration." *Political Science Quarterly*, 2 (2): 197-222.