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NEW PUBLIC MANAGEMENT 25 YEARS ON: THE JOURNEY OF A CONCEPT. A 25-YEAR
BILIOMETRIC ANALYSIS ¹

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Abstract

This article uses bibliometric analysis to track the breadth and depth of the concept of New Public Management as it has developed in the twenty five years since the coining of the term in order to provide a deeper understanding of how academics have engaged with the subject. The paper uses bibliometric and qualitative analysis to map the use of the concept as a whole and over time, and the use of bibliometrics provides an original, methodical and quantitative way of analysing the usage and movement of New Public Management as a concept. It looks at breadth of the literature in terms of whether it has spread to new journals or academic disciplines and depth in terms of whether articles on NPM engage with new research on the subject. It is shown that the breadth of the literature has increased, but there has been no significant deepening. By providing an overarching view of New Public Management as a concept, this article allows for more systematic academic engagement with the concept, leading to a deeper research agenda that goes beyond its current somewhat limited usage.

Keywords: New Public Management; public management reform; bibliometrics

NEW PUBLIC MANAGEMENT 25 YEARS ON: THE JOURNEY OF A CONCEPT. A 25-YEAR BIBLIOMETRIC ANALYSIS

Introduction

The body of literature on New Public Management (NPM) is varied and immense, cutting across disciplines in a way that necessitates a quantitative as well as qualitative analysis of how the concept has travelled. Once adopted into the literature, well-known concepts within a discipline can move (and potentially warp) into new areas of research over time and add breadth to the subject. New research can also increase maturity and sophistication of the idea, adding depth. Both of these changes provide intellectual support for analysing whether concepts have, in the words of Sartori (1970), travelled to new analytical realms or stretched and distorted in their meaning. Mapping a concept over time is a useful exercise in tracing how an idea has evolved and developed, and this approach has been deployed extensively in political study (see, for example, Stephenson, 2013; Avery & Newfield, 1996). However, many of these pieces take a qualitative approach to unpacking the concepts. This is useful for understanding the development and meaning of ideas, but does not always provide a broader picture of the place of the concept within the wider ontological debate or how the concept has diffused through the literature.

This paper examines the concept of New Public Management to illustrate the usefulness of a bibliometrics approach in understanding how an idea is used and developed. NPM is a strong conceptual case for utilising a bibliometric approach, as it is a widely acknowledged and used idea that has also been explored using more qualitative means (see Boston, 2010 for example). The paper tracks the journey of NPM through the academic literature, and the bibliometric approach allows for a quantitative picture of adoption of a concept. This illustrates whether NPM has increased in the *breadth* of use, as shown by a spread in areas and contexts in which the concept is used, and *depth* of use, as shown by engagement and reference to new and varying literature within articles on the topic.

The first section of the paper will look briefly at the genesis of NPM, the origins of the concept and its growth in politics and public administration literature. The second section of the paper will concentrate on a bibliometric analysis of NPM literature and build a framework for analysing the breadth and the depth of the literature on NPM. Finally, some conclusions will be drawn about the usefulness of bibliometrics in exploring academic concepts and how this leads to a deeper understanding of terms such as New Public Management.

Where does the concept come from? The qualitative origins of New Public Management

In 1991, Hood published 'A Public Management for All Seasons'. This article focuses on 'the doctrinal content of the group of ideas known as 'new public management'(NPM); the intellectual provenance of those ideas; explanations for their apparent persuasiveness in the 1980's; and criticisms which have been made of the new doctrines' (Hood 1991: 3). While this 1991 article in *Public Administration* is the article that is normally cited and incorrectly attributed as the one that coined NPM as a concept (Christensen and Laegreid, 2010; Lynn, 2005; Eliassen & Sitter, 2008; McLaughlin & Osborne, 2002; Barzelay, 2002), it is not the first place where Hood used the concept (Hood, 1989).

The 1989 article defines NPM as follows: 'NPM is a convenient, if somewhat loose, shorthand to denote the set of quite similar administrative doctrines which came into the ascendancy in the late 1970s and the 1980s and dominated the agenda of public administration in many countries, including New Zealand, Canada, Australia (particularly under the Cain government in Victoria and the Greiner government in New South Wales), and the United Kingdom.' (Hood, 1989: 349). Really, NPM as a concept was simply coined to identify and connect public management reforms that were already taking place (Kramer, 1983; Elmore, 1986; Painter, 1988; Keating, 1989; Eliassen & Kooiman, 1987). Hood himself admits it is '[a] term coined in the late 1980s to denote a new (or renewed) stress on the importance of management and 'production engineering' in public service delivery, often linked to doctrines of economic rationalism' (Hood, 2001: 12553). In an editorial that appeared a year before Hood's article, Martin Painter had talked about a major move from 'public administration' to 'public management' and mentioned the emergence of a 'new public management orthodoxy' which went on to describe many of the core features of NPM as part of this new orthodoxy. (Painter, 1988: 1).

Many authors can claim ancestry to NPM, though without actually using the concept. The principles of New Public Management emerged and were introduced gradually in the 1970s and 1980s in various public sectors, without being labelled as such. In fact, for Hood, the 'landmark' text on NPM is the document 'Government Management', written by the New Zealand Treasury in 1987 (New Zealand Treasury, 1987) to brief the incoming government. Academically, there was also a gradual shift from public administration to public management (Eliassen & Kooiman, 1987). The emergence of the concept of NPM came at a time when many academics were witnessing a major shift to a post-bureaucratic era (Aucoin 1990), and various books and articles helped to put the concept of NPM or its ideas firmly on the agenda (Pollitt, 1990; Barzelay, 1992; Boston, 1991; Aucoin, 1995).

In 2004, Hood and Peters published an article in the *Journal of Public Administration Research and Theory* about the middle age of NPM. They talk about an NPM industry (p. 267), 'many neologisms' (p. 267), and 'the growth of this epistemic industry' (p. 267). They distinguish 'three main phases or

“ages of NPM” (Hood & Peters, 2004: 267): an early phase, which was mainly descriptive and broad-brush, consisting of many philosophical critiques and a focus on traits and commonalities of reforms; a second phase emphasising cross-national differences and variation; and a third phase, beginning in the late 1990s showed ‘increasing intellectual self-awareness’ (p. 268) and a focus on intellectual origins.

Analytical framework and methodology

Bibliometric analysis has a long history, both in general use and in examining the characteristics of literatures on specific subjects, concepts and trends (see Lawani, 1981; Hung 2012; Bornmann, 2013), including political and public administration concepts (Vogel, 2013).

In looking at discipline-specific bodies of literature, bibliometrics can help to identify:

1. The quantity of the literature;
2. The temporal span of the literature;
3. The principal forms of the literature;
4. The general importance of the literature;
5. The most important titles for each field; and
6. The origins and spread of the literature (adapted from Lawani, 1981, pp. 309).

Previous bibliometric research (Price, 1970, 1979; Lawani, 1981; Line 1993; Antonakis et al., 2013) shows that careful analysis can provide insight into both the *breadth* and the *depth* of the literature on a concept.

Breadth refers to the distance or spread and quantity of the concept of NPM through the academic discipline and beyond. To assess breadth, we examine the complete population of articles on the New Public Management. Key indicators on breadth are:

- a. Production of articles on the concept;
- b. Subject spread of articles on the concept;
- c. Journal sources of articles.

According to bibliometric theory, we can expect a concept with *breadth* to be one that exhibits an increasing production of articles on the subject, an increasing spread in the number of subjects in which articles on a subject appear and an increasing number of journals in which these articles are published.

Depth of the concept refers to the permeation of NPM as a concept within academic disciplines and a maturation of the idea as more literature and sources are used to develop the concept. To assess depth we look at the reference material used in articles on NPM. A diffuse and current body of bibliographic

references used suggests the existence of a deep, well-developed and specialised body of literature.

Key indicators on depth are:

- a. Diffusion of references;
- b. Specialisation of references;
- c. Usage of contemporary references.

Based on bibliometric theory (Narin et al., 1994, pp. 69-70), key articles in the genesis and understanding of NPM will be those that are most regularly cited in articles on the subject. From these 'important' articles we can ascertain the richness of the concept in making use of a wider literature. We can expect a concept with *depth* to be one where a wider variety of references is used over time, more recent references become more prominent over time and references become more specialised over time (marked by a lessening reliance on review articles).

Using this framework, and based on previous bibliometric research on similar issues (Price, 1970, Price, 1976; Lawani, 1981; Line 1993; Antonakis et al., 2013), we would expect that a more 'mature' NPM literature would exhibit:

- Expansion beyond its traditional public administration bounds into new research areas, thus increasing its *breadth* by permeating new research areas.
- Current, specialised and diffused use of references within this literature, thus increasing its *depth* as new research is cited in articles dealing with NPM.

Articles on New Public Management were identified using the Web of Science database. WoS was used as it is one of the key databases of journal articles in the field of public administration and provides extensive coverage of highly ranked public administration journals. In addition, WoS is compatible with BibExcel, the programme used to perform the bibliometric analysis (Persson, O., R. Danell, J. Wiborg Schneider, 2009; <http://homepage.univie.ac.at/juan.gorraiz/bibexcel/>). The use of a professional database such as Web of Science is seen as a useful bibliometric source, as quality control is more rigorous than on similar sources like Google Scholar (Aguillo, 2012) and contains more data useful for bibliometric analysis. A topic search (which looks at title, abstract and keywords) on 'New Public Management' and 'NPM' was conducted. The search was conducted across disciplinary categories to ensure that all articles were identified. A total of 1,069 articles on NPM were found with a total of 47,275 usable references within those articles. Cited references were extracted and standardised manually to ensure that articles were not miscategorised due to slight differences in names, abbreviations or other citation standards. These references were then used in many of the measures explored below, which allowed for all research – including books and articles not included in the original article database – to be drawn upon to develop a map of the NPM literature.

The total number of articles and references were then analysed based on journal, year and other factors in order to develop a map of 1) what articles were used repeatedly to develop the concept of NPM; and 2) how reflexive NPM is as a concept – that is, what NPM articles are cited by other articles on NPM. Two caveats must be noted. Due to limitations in Web of Science (WoS) and general usage of the actual term ‘New Public Management’, the date range of articles only runs from 1993 – 2013 and rely on the author using the term ‘New Public Management’ or NPM as a keyword or in the title or abstract. Second, Web of Science collects only articles, which is somewhat problematic in a book-heavy discipline such as public administration. However, non-article sources are incorporated into the analysis through the bibliographies of these articles, which include the key books and other non-article sources used in the NPM literature.

Analysis

A simple analysis using the Web of Science category term ‘Public Administration’ lists Hood’s 1991 article as the most cited article in the entire discipline, with a citation count of 1332² (as of 27 January 2016). This is considerably above other seminal highly-cited articles that had agenda-setting impacts on the field, such as Sabatier’s work (1988) on the Advocacy Coalition Framework, Scharpf (1988) on governance, Weiss (1979) on research utilisation, Lindblom on muddling through, Dolowitz and Marsh on policy diffusion, or Perry and Wise (1990) on PSM. This indicates the clear centrality of the concept in contemporary public administration literature.

The breadth of NPM

Indicator One: Production of articles on the concept

Over the years, articles on NPM were published in a total of 356 journals. Of those, only 15 journals published ten or more articles on the topic, and 219 of those journals only published one article on the topic. Most of these works took the form of articles (820), but also included a significant number of proceedings papers (213) and reviews (87). Approximately 1450 authors addressed the subject, although only 17 authors published five or more articles on the subject and approximately 1200 of those authors only wrote one article on NPM. These numbers fit in with generally applicable bibliometric patterns. Lotka’s distribution indicates that a relatively small percentage of authors will be responsible for a disproportionately large number of the publications in any given field (Lawani, 1981, pp. 299; O’Connor & Voos, 1981, pp. 12-13). Cumulative advantage distribution states that success begets success, with highly cited papers being more likely to continue to be cited in high numbers (de Solla Price, 1976, pp. 293). By a simple count, it is clear that articles dealing with NPM

² Citations in other journals included in Web of Science.

continue to be written and are published in numbers that have only increased over the 25 years since the concept was introduced.

INSERT FIGURE 1 ABOUT HERE

While the data is not robust enough to pinpoint specific countries of origin for each article, an increasingly linguistic spread for the concept was evident.³ 89 of the 1069 articles (8.3%) were written in a language other than English, with French and German the most commonly used languages (24 articles each, or 2.2%). There was a general upward trend in the use of NPM in other languages, but no clear indication of how the concept has migrated beyond the English language.

Indicator Two: Subject spread of articles on the concept

We can observe an increased subject spread of articles in the area, suggesting a widening breadth of NPM. In addition to politics and public administration, top articles on NPM also covered subject areas such as education, law, organization studies, information technology, education, health and social work, indicating a continued and widening interest in NPM. Using the Web of Science category fields to identify fields of study, articles on NPM were found in 86 categories (34.5% of 249 total available categories in the latest version of WoS). The number of categories covered each year has been on an upward trajectory, with the most diverse years being 2009 and 2012, where NPM articles were published in 42 categories each year. As articles were often placed in multiple categories, a weighted measure was used in which each article only accounted for a total of 1.0 category. Using this method, the top ten categories in which NPM articles were published is shown below.

INSERT TABLE 1 ABOUT HERE

Most articles were written in public administration, but the rate of articles published in other areas increased over time and in 2012, 2.35 articles in non-public administration categories were written for every one article in public administration.

Indicator Three: Increased journal sources of articles

In terms of articles directly addressing NPM, *Public Administration* was the journal that published the most articles on the subject, with 69 articles since the term was first introduced. This was followed by the *International Review of Administrative Sciences (IRAS)*, *Public Management Review (PMR)*, *Public Administration Review (PAR)* and the *American Journal of Public Administration (AJPA)*. While year-on-year numbers are relatively small and do not indicate significant trends, to a certain extent *Public Administration (PA)* was more likely to publish NPM-related articles in earlier years, whereas this shifted in later years, with *PMR* and *IRAS* posting the highest number of articles. The

³ Please note that this only includes incidences where the term 'New Public Management' was used directly, and not instances where the concept may have been translated into other languages.

number of overall journals in which NPM articles were published also followed a general upwards trajectory.

These findings confirm that the breadth of NPM literature has increased, with a steady rise in the number of journals in which NPM articles were written and a rise in the number of article published on NPM each year. In addition, the most cited articles cover a wide variety of subject areas.

The depth of NPM

Indicator One: Diffusion of references

The 1,069 articles contain over 47,000 citations, showing a significant diffusion of references, but only 175 of those sources were cited by more than 10 NPM articles. Optimistically, this could point to the continual use of external literature to build upon the concept. Less optimistically, it could indicate a failure to engage with existing NPM literature to further develop the concept. Given the complete dominance of Hood's 1991 article overall (1332 citations in Web of Science as of January 2016) and year on year, it seems a case can be made for the latter, with few recent sources gaining much traction in being cited within NPM articles.

Interestingly, the body of journals that are most cited *in NPM articles* is different from the body of journals in which *NPM articles are published*. Most starkly, while articles from the *International Journal of Public Sector Management* were heavily referenced *in* NPM articles, no articles *on* NPM published in that journal have been significantly cited. *IRAS* and *PMR* were also much more likely to be cited in NPM papers than to publish influential NPM articles. In contrast, while journals like the *American Review of Public Administration* and *Accounting Organizations and Society* had NPM articles with high citation rates, they had few articles that were routinely used as sources in NPM articles. This signifies a significant disconnect between articles *about* NPM and the references that are used to write these articles. This could mean there is a large difference between how NPM scholars approach the topic and how people actually apply the scholarship on NPM. However, more research has to be done to verify this and regardless, there is a reasonable diffusion of resources used in writing about NPM.

Indicator Two: Specialisation of references

The top 50 sources for NPM research reveals that over half of the most cited sources are books, with most of these presenting a broad survey of NPM issues. A large majority of the articles in the top 50 come from public administration or politics journals and only 15 articles in the top 50 were written after 2000. The top fifty articles are heavily dominated by two authors – Christopher Hood (six articles) and Christopher Pollitt (six articles), with those two authors also accounting for five of the

top six most cited articles. Rhodes (three articles) and Dunleavy (three articles) were also significant in the top 50, with many other authors having two articles. Hood's 1991 article was the most cited in every year apart from 2003 and 2006, where Pollitt's *Public Management Reform* book was most cited. Hood's 1995 article and Osborne's book *Reinventing Government* were also routinely in the top five most cited sources. Literature may get routinized over time, where certain sources – such as Hood, 1991 – may become the 'default citation' when an author wishes to mention a concept without going into depth on the concept itself. The tendency towards generalist literature is not unique to NPM and this inclination is evident in research in other areas (Antonakis et al., 2013). The fact that certain articles achieve a relative 'stickiness' and articles that are most cited tend to attract even more references has also been documented in other research areas as well (Line, 1993, pp. 671). Still, the heavy reliance on several key articles along with review articles and books indicates no particular specialization of references over time and may point towards stagnation of the concept.

Indicator Three: Usage of contemporary references

The top 100 articles used in NPM articles were cited a total of 3,063 times, with the top article being cited 220 times (Hood, 1991). Four articles were cited more than 100 times (Hood, 1991; Osborne, 1992; Pollitt, 2000; Pollitt, 2004) and a further four were cited over 50 times, with a precipitous drop-off in citations beyond that point, with the 100th most cited article being cited 13 times. A year-on-year comparison also shows that articles written in the 1990s were more referenced than newer (or older) articles, with 63.5% of references in NPM articles coming from 1990s sources. In addition, 12 of them predate the introduction of NPM as a unique term, 59 were written in the 1990s and only 29 were written in the 2000s. The latest article to appear on the list was one article from 2007, and the earliest one from 1957. These findings run somewhat counter to a large body of bibliometric research and the concept of obsolescence (Line and Sandison, 1974; Sandison, 1987; Line 1993; Rowlands and Nicholas, 2007, pp. 226). This idea states that in non-obsolete cases, 'literature of the past few years account for a large proportion of total citations' (Lawani, 1981, pp. 31), with usage then dropping off due to incorporation into later works, decreasing validity of research, or numerous other factors (Meadows, 2005, pp. 91). The fact that the most extensively cited literature on NPM does tend to be older is important and telling. Only 8% of NPM sources come from the last five years, which is a commonly used benchmark for distinguishing the 'hardness' of the concept in question (Price, 1970). The mean reference age, which can be seen as an indicator of currency of the literature, is over 16 years for references in NPM articles. While no direct comparison is available, this is significantly higher than (somewhat outdated) averages available for similar disciplines such as economics (10.6), business (10.9) and sociology (12.5) (Glanzel and Schoepflin, 1999, pp. 41). It is important to remember that books and descriptive, conceptual and critical literature tend to have a slower decay rate than journal articles (Line, 1993, pp. 670, Line and Sandison, 1974, pp. 317-318). However, it has

also been found that older sources in social science were *less* likely to be cited than in natural science (Line, 1979), which underscores the relatively long mean reference age evident in the NPM literature.

While sources used in research on NPM are diffuse, many of the top-cited sources are review articles, indicating little specialisation in the literature over time. In addition, the most referenced articles tend to be older with little focus on contemporary scholarship. Therefore, the *breadth* identified earlier in this paper has not been matched by increased *depth*.

Conclusions: The Changing (?) Face of New Public Management

Overall, quantitative bibliometric analysis helps to trace the relevance of concepts in an academic context and provide new insight into how the concept has developed over time. This article examined the NPM literature over the 25 years since the concept was first coined to assess the *breadth* of the literature, looking at the numbers, journal sources and subjects of articles written on NPM. Second, it examined the *depth* of NPM literature, focusing on the diffusion, specialisation and recency of references used in NPM literature. This analysis reveals a literature that is broad, but lacks depth and contemporaneity.

INSERT TABLE 2 ABOUT HERE

In terms of breadth, *activity* in NPM literature has increased over the years with an increased production of articles on the topic. The subject and journal spread of these articles has also increased. The story is different in terms of depth, which looks at references and sources used in NPM articles. While there has been an increased diffusion of references used in NPM articles, there has been little or no specialisation of the literature used to write about NPM, and very few recent articles about NPM are cited in the literature. This points to little significant deepening of the concept over time, as references rely heavily on older literature.

These findings raise interesting questions for the future of NPM 25 years on. While the concept has moved successfully into new areas of study and broadened its usage over time, there has been less interest in developing the concept beyond its traditional moorings. In terms of scholarship, this indicates an often shallow engagement with NPM as a concept, instead focusing on applying it in new contexts. Furthermore, in terms of viewing NPM as a governance tool, this could indicate a stronger push to applying NPM processes in new areas rather than critically engaging with the repercussions of what NPM *is and should be*. Although this can be seen as mixed findings for the continued relevance of NPM as a concept, it also points to opportunities to further engage with the wealth of literature that has been written on the topic since its inception. Many of the conceptual underpinnings of NPM have entered practical usage in public administration worldwide, and the current financial crisis requires

new ways of thinking about public management. Therefore, a focus of *deepening* the literature can only be beneficial in furthering academic and practical debate.

More importantly, this article points to an interesting and useful new way of engaging and reviewing a literature in order to better understand the conceptual underpinnings of a discipline. While previous qualitative analyses of the NPM literature have looked at what the concept means and how this has evolved over time, this quantitative bibliometric analysis provides a new layer of nuance and places the concept within the broader politics and public administration literature. By separating out the breadth and depth of the literature on any given topic, bibliometrics allows for several important types of analysis. It illustrates if and how the concept has moved through the discipline and beyond (breadth), and whether this spread has led to a deeper engagement with the literature in further research on the subject (depth). The approach allows us to see the concept not in isolation, as may be the case in more qualitative reviews (useful as that can be), but rather in the context of the broader discipline and literature.

This has wider implications in how we can then aim to strengthen research on a topic. If a literature lacks breadth, there could be a need for application of a concept in new realms and contexts. If a literature lacks depth, this could indicate a need for engagement with newer and more specialised research on a topic. In the case of NPM, while it has considerable breadth as a concept, this analysis has shown that scholars should work to more actively engage with contemporary and specialised research on the topic in order to advance the concept. By making use of bibliometrics, the holes in the literature can be more easily identified and concepts can be further strengthened both practically and academically.

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Table 1: WoS subject categories

WoS Category	Weighted Total Number of Articles
Public Administration	423.15
Political Science	111.66
Management	97.84
Education & Educational Research	49.91
Sociology	48.31
Planning & Development	30.62
Economics	24.99
Social Work	22.41
Business & Business Finance	36.65
Social Sciences, Interdisciplinary	14.35

Table 2: Bibliometric Indicators for New Public Management

	Indicator	Presence in NPM literature		Indicator	Presence in NPM literature
Breadth	Increasing production of articles in the area	✓	Depth	Increased diffusion of references	✓
	Increased subject spread of articles in the area	✓		Specialisation of references	X
	Increased journal sources of articles	✓		Usage of contemporary references	X