

From the Boardroom to the Bedroom: The Expansion and Abstraction of Management as a Cultural Logic

Keywords: text analysis, management, cultural evolution, information diffusion, cognition

Extended Abstract

Management, defined as a set of efficiency-maximizing practices like planning, organizing, and controlling, has gone beyond the scope of business corporations. More and more people are utilizing management techniques in various social domains, including time management to structure their daily activities, stress management to enhance their mental well-being, and body management to control their eating and exercise routines. Furthermore, professional management techniques like OKRs, performance reviews, and focus groups have become increasingly common in non-management settings such as education, science, family life, and even romantic relationships.

How did we end up in a society that is full of management ideology? What is the diffusion process of management concepts to non-business sectors? Despite the importance of these questions, we often lack a systematic understanding of how management logic expands from corporate and financial circles to other professional sectors and eventually to private, everyday lives. While studies have focused on how management mindsets are used in specific areas such as body regulation, self-improvement, and household labor, it remains unclear how and when this transition occurs. It is also unclear which social demographic groups are most susceptible to management logic. Therefore, investigating the time and range of the expansion of management logic is crucial to better comprehending its pervasive appearance in our society.

This study aims to provide a systematic analysis of the diffusion process of management logic. We analyzed the usage of words in millions of articles published over the past century in two major US news outlets, The New York Times and the Washington Post. We employed recursive searches of the modifiers and children of the term "management" in sentence-level dependency parsing trees to extract the domains of management. After retrieving all the management domains, we examined both the overall trend of management discourse in the entire corpus and the rise and fall of individual domains. Figure 1 depicts the percentage of documents containing management-related concepts in the entire New York Times corpus from 1920 to 2020. Over the past century, discourse related to management has increased by approximately 250%. Additionally, we found that the management of "anger," "pain," "weight," "stress," and "relationship" are among the fastest growing. The frequency of anger management increased by about 6,700 times after 1980. Moreover, the management of "innovation," "vision," and "leadership" is also rapidly growing, whereas traditional areas of management such as "corporation," "labor," and "estate" are declining steadily.

To further quantify the trend we observed, we developed two additional measures to categorize the domains of management. The first measure classifies a given word as either a business or a non-business term. Building on prior research (Kozlowski et al., 2019), we used a pre-trained word embedding model to construct the dimension of business versus non-business. We calculated the normalized distance between word clusters that represent business concepts,

such as "corporation," "company," "firm," and "commerce," and non-business concepts, including "emotion," "family," "health," "life," and "friend." A word is classified as a business term if its projection value onto the business-nonbusiness dimension is higher than randomly selected words. The second measure we employed is the abstractness level of a given word, which we estimated using human annotations (Brysbaert et al., 2014). The scale of abstractness ranges from 1 to 5, with 1 being the most abstract and 5 being the most concrete.

Figures 2 and 3 display a remarkably consistent pattern of the expansion of management ideology. Figure 2 demonstrates that the proportion of non-business modifiers (i.e., domains) has gradually increased since 1940. After 1980, the proportion of non-business modifiers surpassed 50%, indicating that management has been discussed more in personal realms, such as emotion and relationships, than in business realms like corporations and estates. Figure 3 illustrates the increasing abstraction of management applications. Compared to 1950, the average level of concreteness of management modifiers dropped by approximately 10%. We further observed that the trend of increasing abstraction is more prominent within business modifiers than non-business modifiers. This highlights a significant shift in business management, where bright and empty terms such as "innovation" and "leadership" have replaced more practical and concrete practices.

The expansion of management logic into personal lives and its increasing abstraction reflect an essential, yet not fully quantified, process in the cultural evolution of ideas. Linguistic studies have shown that ideas extend their meanings by forming novel associations with other domains of knowledge (Dirven & Pörings, 2009). Management has also followed this trend. By gaining new associations with various personal domains, management acquires a broader, more abstract meaning, moving beyond its original association with business logistics. Being abstract also enables management to be flexible enough to connect distinct domains of knowledge. The interplay between expansion and abstraction has formed a feedback loop, where forming more associations makes the concept of management more abstract, and being abstract, in turn, makes extending its meaning even easier. As such, the wider management spreads, the more likely it is to acquire abstract meanings. While some practitioners may feel that management has become too vague, its abstractness, in fact, indicates that it has become deeply rooted in our neoliberal society.

Our study contributes to the theory of management and cultural evolution by providing a granular measurement of the extent and duration of the expansion of management logic in the past century. It is among the first to account for the complementary relationship between meaning expansion and abstraction in the knowledge diffusion process. Our findings are also relevant to the ongoing discussion on the moral and ethical implications of management ideology.

References

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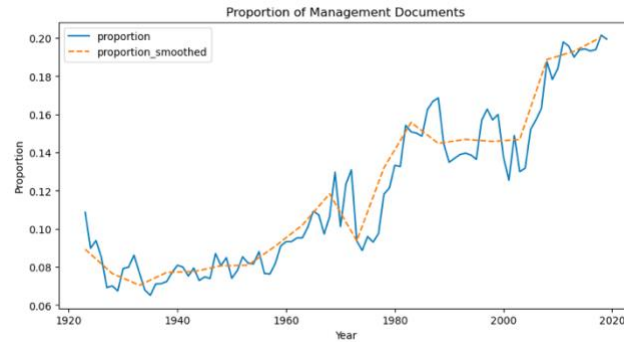


Figure 1: The proportion of documents that contain management-related words in NYT corpus. Smoothed line produced by a 5-year average. Washington Post corpus has an identical result.

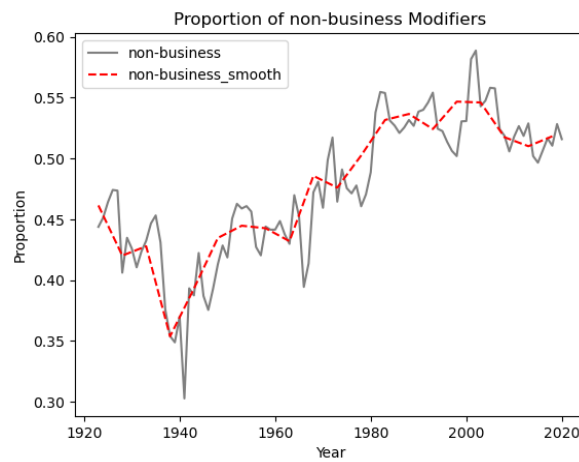


Figure 2: The proportion of non-business modifiers among all modifiers of management in NYT corpus. Smoothed line produced by a 5-year average. Washington Post corpus has an identical result.

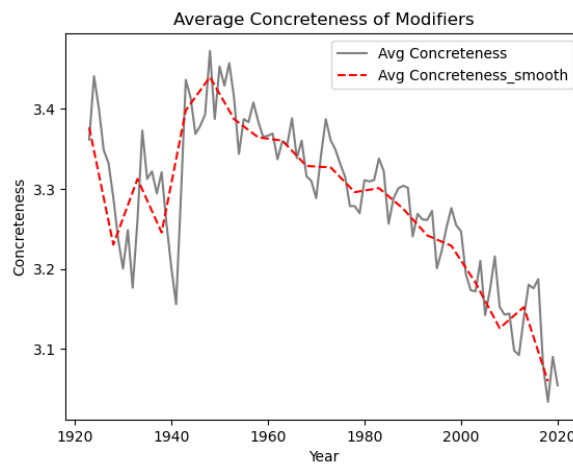


Figure 3: The average of concreteness of management modifiers in NYT corpus. Smoothed line produced by a 5-year average. Washington Post corpus has an identical result.