

Coherence and Oddities: A Retrospective of Cost Estimating Publications 1978-2016

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Abstract

Intellectual sedimentation can operate unobserved within professions. Assessing publication trends serves to make such conventional wisdom explicit. Our analysis of articles from the *Journal of Cost Analysis and Parametrics* (and its predecessors) provides insight regarding research coherence and oddities within the cost estimating community. This knowledge is essential for envisioning alternative futures and could be of benefit to those engaged in the praxis of cost estimating or its research.

Provocation vs. Introduction

“All societies discourage and penalize ideas and writings that threaten the ruling status quo.”

-Saul Alinsky

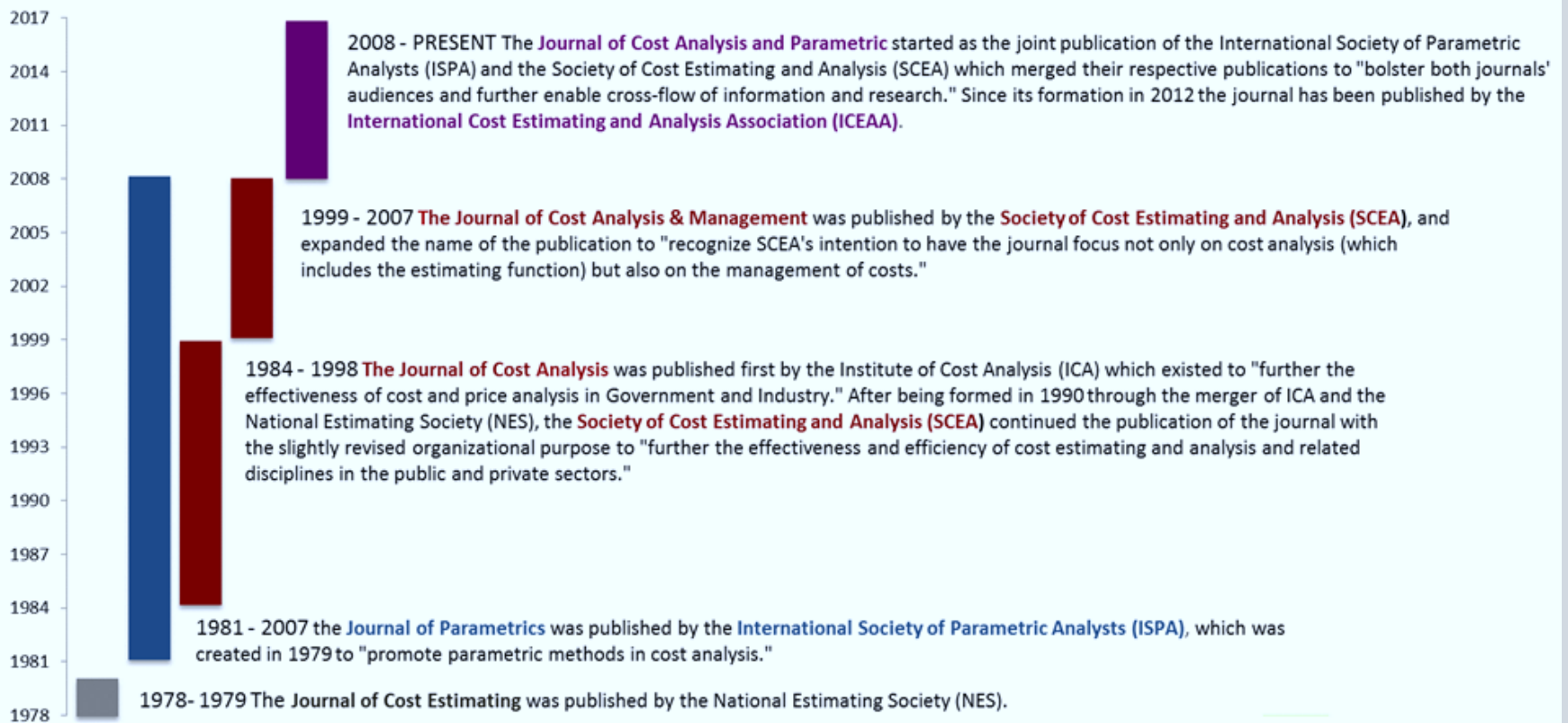
Background

- Organizations frequently engage in “retrospective sense-making” (Weick, 1979)
- Several, high-quality reviews have occurred within the cost estimating community on specific areas of interest in estimating and analysis (Black, 1997; Christensen et al., 1995; Valerdi, 2015).
- Holistic review of the cost estimating corpus is lacking
- Early concerns identified in *JOP*:
 - Debate as to appropriate focus: theory/application
 - Concerns of sector dominance: too many defense/aerospace articles

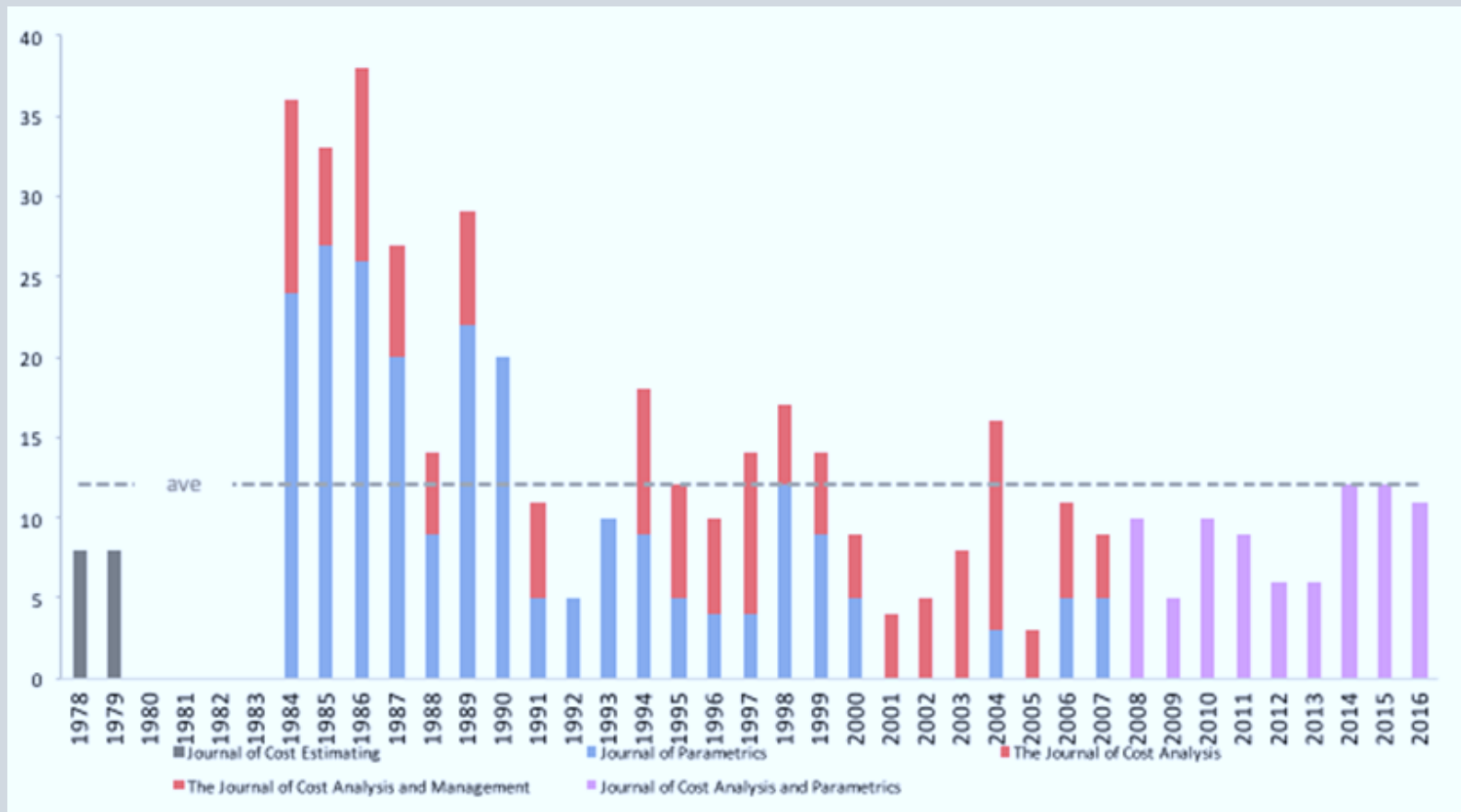
Research Focus and Approach:

- Cost estimating articles from the following journals:
 - *Journal of Cost Analysis and Parametrics (JCAP)*
 - *The Journal of Cost Analysis & Management (JCAM)*
 - *The Journal of Cost Analysis (JCA)*
 - *Journal of Parametrics (JOP)*
 - *Journal of Cost Estimating (JCE)*
- Assessment matrix comprised of six major elements:
 - Sector
 - Primary subject classification
 - Research type
 - Research design
 - Analytic methodology
 - Analytic technique

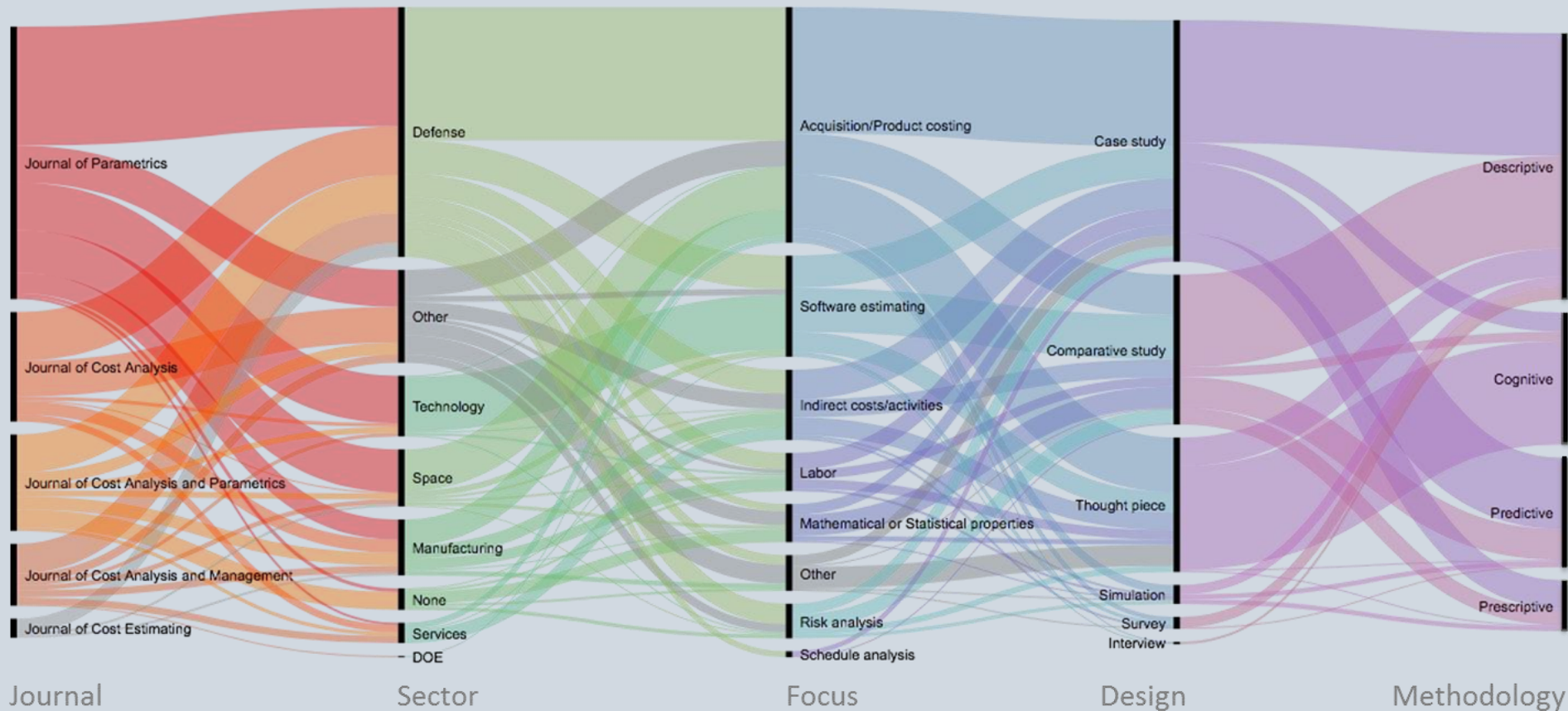
Publication Timeline and Context



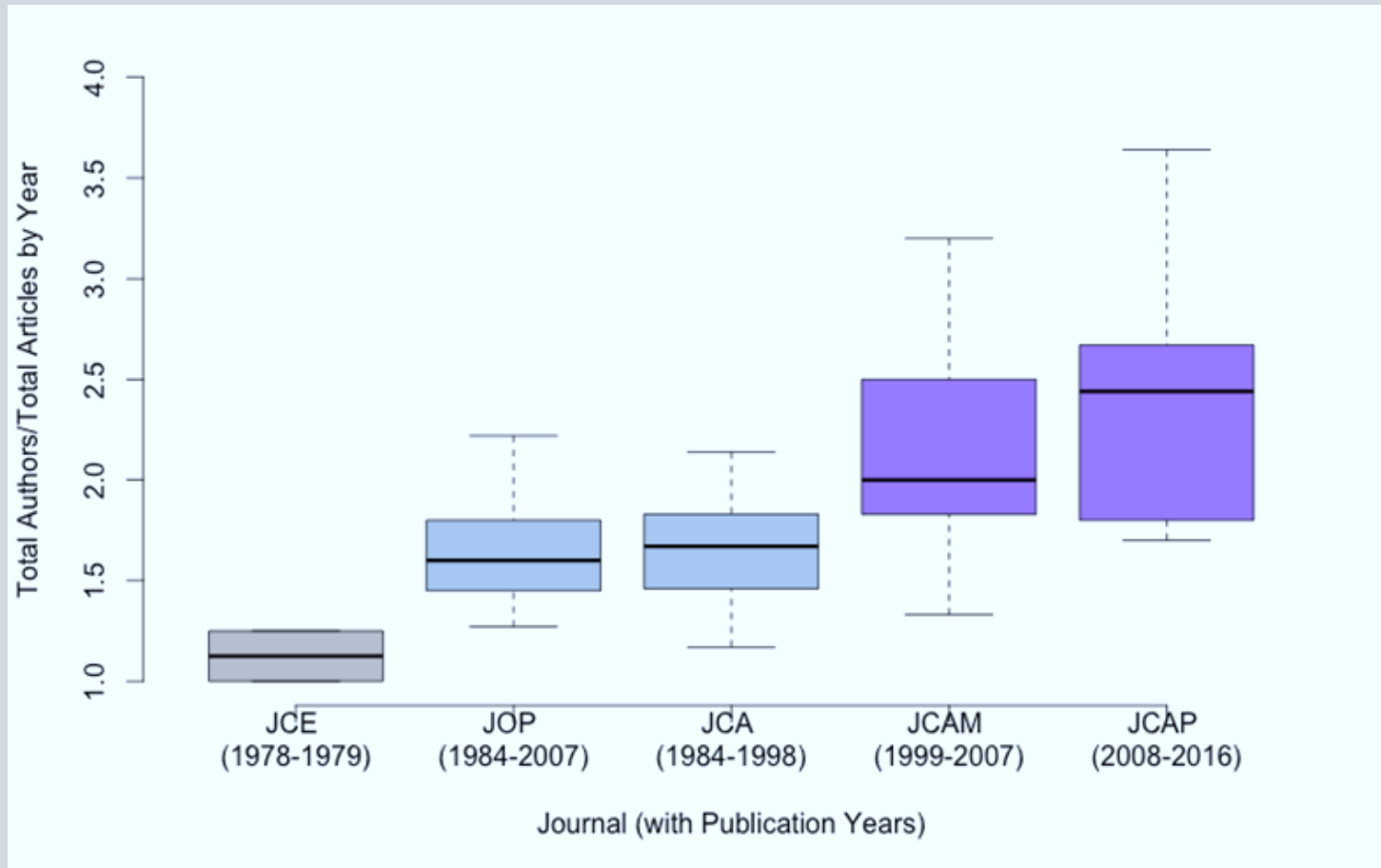
Aggregate Publications by Year



Dominance and Obscurity in Publication Content & Approach



Increasingly Collaborative in the Pursuit of Publication



Future Research

- Refinements of this study:
 - Adjudicate *JOP* articles from volumes 1-3 (1981-1983)
 - Time series analysis related to research foci
- Extensions from this study:
 - Determinations of article rigor of corpus:
 - Number of references cited
 - Flesch-Kincaid readability score
 - Network of published authors
 - Frequency analysis of publication citations
- Conduct similar research on articles prior to 1978
- Close reading of parliamentary documents of respective societies/professional organization

Thoughts from Assessment...

- Retrospectively, from 1978 through 2016 one observes:
 - Coherence and oddities
- After 38 years, and 470 articles, it is clear those engaged in cost estimating are committed to improving its praxis
 - To what end?---
- “The opportunity to do the research that is required to separate fact from propaganda is limited to a privileged few” (Chomsky, 1967)
- What is the institutional role we envision as a cost estimating community for analysis and analysts?

Discussion

I appreciate your presence, and hope for discussion...

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