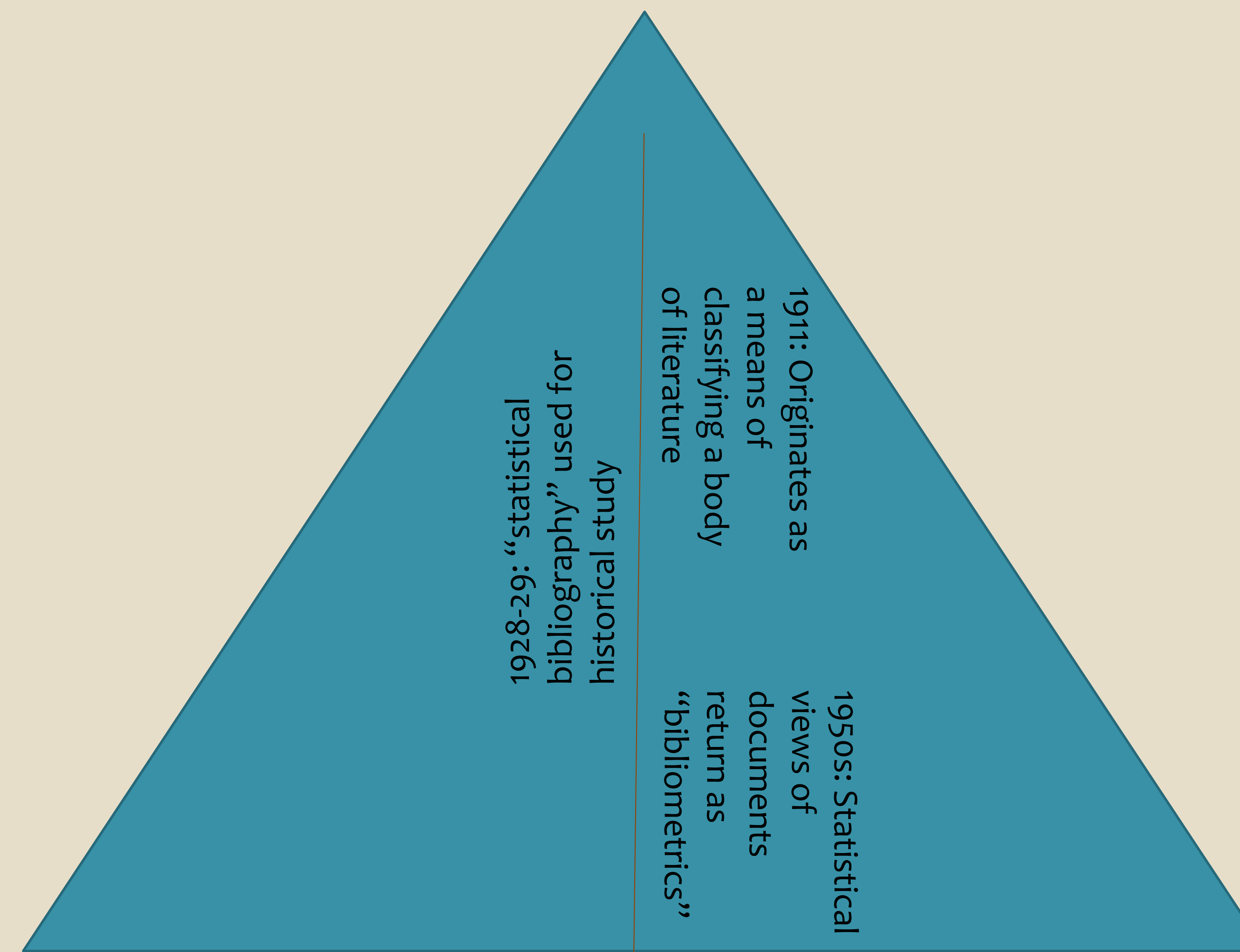# By the Numbers: Literary Warrant and Quantitative Perspectives in Information Science
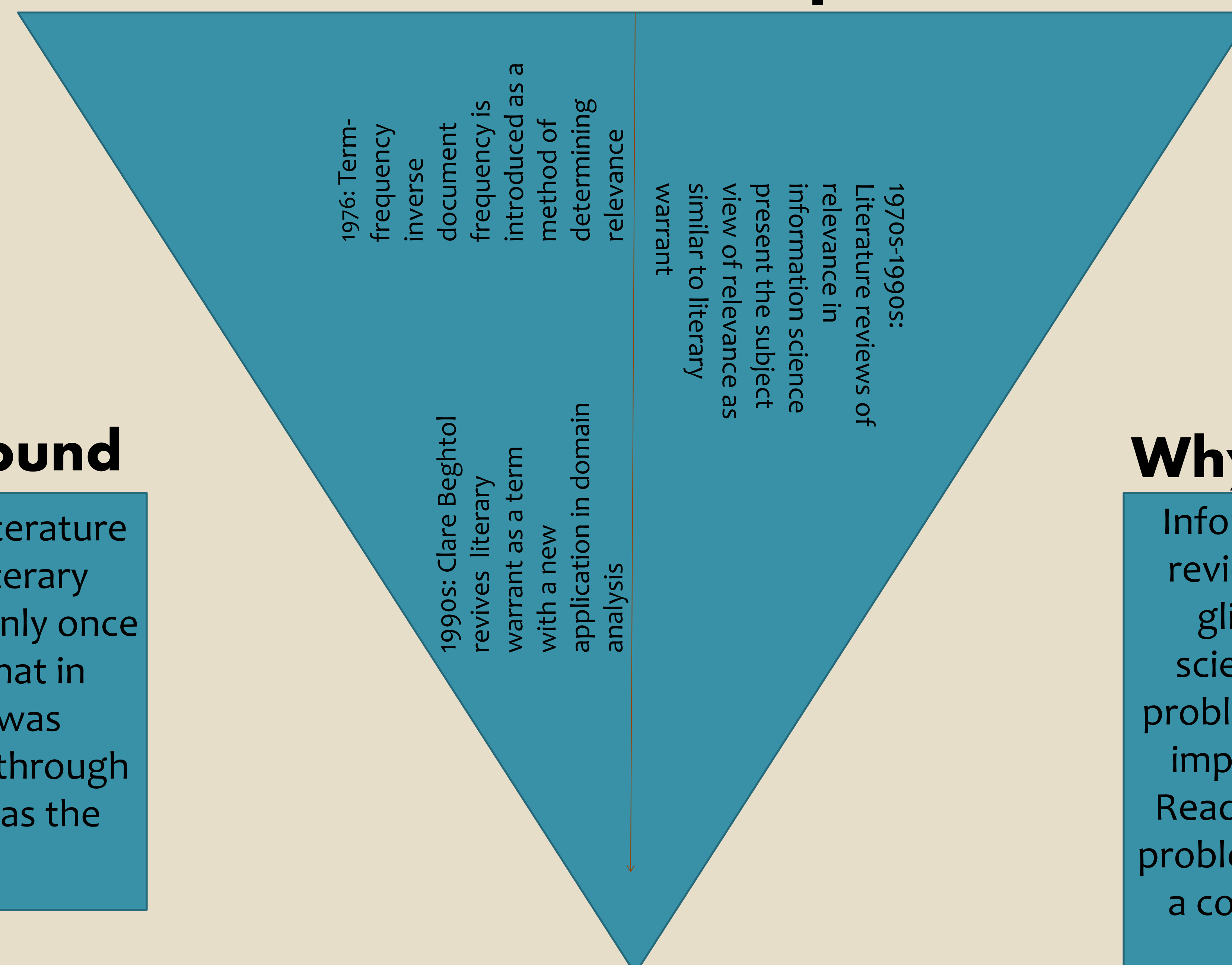
Definition of Problem

For my Capstone, I am tracing the path of the concept of "literary warrant" in classification of knowledge from its genesis in 1911 to its resurgence in the 1990s and early 2000s as the basis of a method for domain analysis. In my overview of the literature I find that the concept of literary warrant is periodically dropped and then arrived at independent of its originators and past authors, which signifies gaps in the information science literature that will ultimately do harm to its academic progress. In order to advance evenly and sustainably, a discipline must have a tradition of knowing its past, the lack of which information science has suffered from in this particular case study.

What do we mean by "Literary Warrant?"

Literary warrant is a term coined in 1911 by E. Wyndham Hulme. When I talk about it, I mean three things:

1) Use of certain terminology in a classification system that is justified by statistical measurements of the terminology in the documents being classified

2) A perspective taken by information scientists when exploring relevance in information retrieval, typically thought of as term-frequency inverse-document frequency

3) A quantitative approach to analysis of a subject domain by which a numerical count of terms is used when enumerating the topics covered by a domain or field

A Timeline of the Concept and Term

1911: Originates as a means of classifying a body of literature

1928-29: "statistical bibliography" used for historical study

1950s: Statistical views of documents return as "bibliometrics"

1970s-1990s: Literature reviews of relevance in information science present the subject view of relevance as similar to literary warrant

1976: Term-frequency inverse document frequency is introduced as a method of determining relevance

1990s: Clare Beghtol revives literary warrant as a term with a new application in domain analysis

Where the thread was found

In my survey of the information science literature from 1911 to the present, I found that literary warrant was coined and then resurfaced only once with reference to its originations, but that in similar but separate fields of study, it was "invented" in all but name. Linking these through literature reviews and article citations was the main objective of my paper.

Why the thread was dropped

Information Science is a problem-solving field. A review of the literature from any given time is a glimpse into contemporary problems facing scientific communication, but too often earlier problems and their solutions are never revisited or improved upon until they become unworkable. Reading narrowly and focusing on contemporary problems only means that when literary warrant as a concept could be reintroduced, it was already lost.