

# The Past and Present Role of the Geoscientist

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## EXTENDED ABSTRACT

### Introduction

There are two ideas for consideration here—competition vs. conformity—which are not mutually exclusive; and taking back the lead in our exploration efforts by making technology work for us. The data should drive the economics not the other way around, and it's all about the data not the interpretation.

As geoscientists, we analyze data and form interpretations that tend to be biased by our background experiences. In the process of accumulating life's experiences we run the risk of converting our interpretations into beliefs. These beliefs can cause us to fall prey to the argumentative theory, where we use reason to win arguments not to find the truth. The consequence of this is to reject data that contradicts our beliefs and accept only the data that agrees. But as geoscientists we should be reminded that our interpretations are only as good as the data we have access to. What I have learned is that there are no good or bad interpretations, only potentially poor choices based on incomplete, inaccurate, or an ineffective and biased integration of the available data.

Additionally, we should be cognizant of the hermeneutic circle concept, or the idea that one's understanding of the text as a whole (as in a novel) is established by reference to the individual parts (chapters) and one's understanding of each individual part by reference to the whole. From a geoscientific perspective, this means our interpretation is more accurate if we include regional (basin) as well as local (field) perspectives of the data being examined, and that the interpretation should progress sequentially, building to a logical conclusion that fits all the data.

... (Note: The full version of this extended abstract, including complete text, illustrations, and references, will be made available at a later date on both the 2014 GCAGS convention website [[www.gcags2014.com](http://www.gcags2014.com)] and AAPG Search and Discovery website [[www.searchanddiscovery.com](http://www.searchanddiscovery.com)]).