



## Explaining the Metaphors Application in the Interdisciplinary Research

Ghasem Darzi<sup>1</sup>

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### Extended Abstract

Analogy and metaphor are among figures of speech and play an important role in explaining the complexity. Even though metaphors often are considered among figures of speech but in recent modern years have been used in Scientific discoveries. So we could consider metaphors as a key instrument for removing ambiguity of complex Phenomena. Complexity is a fundamental Criterion in interdisciplinary studies. So metaphors are very efficient in resolving complexity of interdisciplinary problems. We found six metaphors, as follows, with specific functions in interdisciplinary process: Crossing boundaries, Bridge building, Restructuring, Mapping, Archipelago, and Bilingualism. The four main applications of these metaphors are: 1) Explaining the general meaning of interdisciplinarity; 2) Defining the quality of interaction of disciplines; 3) Determining how to set up a dialogue between disciplines; And 4) Supporting to extract interdisciplinary issues and problems and Research program. With this four applicants we could claim that metaphors are useful instruments throughout the interdisciplinary process.

**Keywords:** metaphor, interdisciplinary, Crossing boundaries, Bridge building, restructuring, mapping, archipelago, Bilingualism

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1. Assistant Professor in Quranic Sciences, Shahid Beheshti University, Tehran, Iran.

✉ [Gh\\_darzi@sbu.ac.ir](mailto:Gh_darzi@sbu.ac.ir)



## INTRODUCTION

Ambiguity and complexity has led to obscured definitions about interdisciplinarity and its process. These definitions need clarification. Metaphors are appropriate instruments for achieving this goal. In this article we try to show how interdisciplinarians use varied metaphors for clarification of interdisciplinary definition and its process.

## PURPOSE

The study aim to show the role of metaphors in interdisciplinarity. Particularly we stress on metaphors functions in interdisciplinarity and four applications for these metaphors will be expressed.

## METHODOLOGY

This study follows a literal investigation in the context of interdisciplinary studies and derivate the distinct metaphors in defining interdisciplinarity and its process. Then by using analytical method, we analyze and extract applied patterns.

## RESULT

In addition to their aesthetic functions in literature, metaphors also have an epistemological application in science, and they can solve many of the ambiguities and complexities of science and lead to the discovery of outstanding scientific achievements.

Complexity and ambiguity in interdisciplinary studies are much more than disciplinary studies, and this also duplicates the need for attention to metaphor in interdisciplinary studies.

The six main metaphors that can be used at different stages of interdisciplinarity are: Crossing boundaries, Bridge building, Restructuring, Mapping, Archipelago, and Bilingualism.

The most important application of Crossing boundaries metaphor is to explain the holistic and general meaning of interdisciplinarity. The discipline and the boundaries of the field have a great deal of ambiguity in which the consideration of the characteristics of the ethnic-national boundaries can be made more clarified by them.

Another three metaphors, Bridge building, Restructuring, and archipelago, can help the researcher to more clearly determine the quality of the interaction of the disciplines.

By bilingual metaphor, we could have more precise and clearer explanation of the fact that how to make dialogue between different disciplines. In this way, the disciplines are likened to different languages that one person wants to master at the same time. Pidgin and Creole languages are good models for determining the quality of this interaction and conversation.

Mapping metaphor also provides the best solution for extracting interdisciplinary issues and a forward-looking research program. Through this metaphor, it is possible to identify the problem roots in other disciplines, and subsequently find the disciplines involved in problem solving. It is also possible to identify and evaluate the different types of communication between these different types and descendants.

### CONCLUSION

Metaphors play a very important role in explaining the interdisciplinary concept and the process of integration. The six important related metaphors are: Crossing boundaries, Bridge building, Restructuring, Mapping, Archipelago, and Bilingualism. Also four main applications of these metaphors are: 1- Explaining the general meaning of interdisciplinarity; 2- Defining the quality of interaction of disciplines; 3- Determine how to set up a dialogue between disciplines; And 4- Help to extract interdisciplinary issues and problems and Research program.

### NOVELTY

- 1) Attempting to defining a new approach toward understanding interdisciplinary meaning and its process of integration.
- 2) Discovering the applications of using metaphors in interdisciplinary studies. By now, no one has pointed out to the functions of metaphors in interdisciplinarity.
- 3) Helping the students and researchers in doing a true interdisciplinary study by introducing metaphor applicants in interdisciplinary process.



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