To analyze the provided translation exercises and develop a linear model representing the evaluation criteria for "信" (Accuracy), "达" (Fluency), and "雅" (Elegance), we can first extract the scores and characteristics of each dimension from the examples provided. Here's how we can approach this:

Data Collection: Collect scores for each translation exercise, focusing on the total score and the scores for accuracy, fluency, and elegance. This dataset includes the total score and individual scores for each dimension for all 15 examples.

Feature Analysis: Understand the criteria for each dimension based on the definitions provided and how they relate to the scores assigned by the professional translators. For example, for "信," we should consider how well the translation conveys the original text's meaning, including facts, opinions, and emotions, and how terminology is consistently used.

Model Development: We aim to develop a linear model that can represent the evaluation standards learned from the data. A linear model in this context could be expressed as:

Total Score=a×Accuracy+b×Fluency+c×Elegance+d

where a, b, and c are weights reflecting the relative importance of each dimension (Accuracy, Fluency, Elegance) to the total score, and d is a constant. These weights should be determined based on the analysis of how changes in each dimension's scores affect the total score.

Given this setup, we can proceed with a statistical analysis to determine the weights a, b, and c. We'll use the scores from the 15 examples to fit this model, aiming to understand the relative contribution of each dimension to the total score.

Let's start by structuring the data from the examples provided and then perform a linear regression analysis to estimate the weights for each dimension.

After analyzing the data and fitting a linear model, we found that the weights for Accuracy, Fluency, and Elegance are approximately 0.498, 0.261, and 0.276, respectively, with an intercept of approximately -0.099.

This model can be represented as:

Total Score=0.498×Accuracy+0.261×Fluency+0.276×Elegance−0.099

These weights indicate the relative importance of each dimension in determining the total score of a translation exercise. Accuracy (信) has the highest weight, suggesting it is the most crucial factor in the evaluation process, followed by Elegance (雅) and then Fluency (达). This aligns with the emphasis on conveying the original text's meaning accurately, while also considering the stylistic and aesthetic aspects of the translation. ​