ZZSC5960- Assessment 4 (Part 1)
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The fisher information (matrix) represents the degree of information a *random variable* carries about an unknown *parameter* through the curvature of its likelihood function. Higher curvature indicates variables carry greater information, and lower curvature indicates weaker information.

Since Jeffrey's prior is derived from fisher information, it is also derived from the same data generating process which achieves two goals:

1. invariance under reparameterization
2. and non-informative priors

In other words, because Jeffrey's prior uses only the original data generating process, information does not change under reparameterization. Additionally, it is non-informative, as using the same data generating process for both the prior and likelihood, adds minimal information to the distribution.

Hence, because of these properties, Jeffrey's prior uses Fisher information (matrix) to capture the prior information (certainty) about the estimated parameter, while adding minimal information and retaining invariance under reparameterization.