Example data structure in a discrete choice experiment:

ID	Scenario	Alternative	Chosen	Z
1	1	A	1	2.3
1	1	B	0	1.8
1	1	C	0	3.1
1	2	A	0	2.5
1	2	B	1	2.9
1	2	C	0	1.7
2	1	A	0	3.2
2	1	B	1	4.1
2	1	C	0	2.8

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Each individual faces multiple scenarios, each with multiple alternatives

- Estimation proceeds as if one has panel data on choices (Rust, 1987)

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- Can estimate assuming multinomial logit, nested logit, mixed logit, etc.

Example data structure for rank-ordered logit:

ID	Scenario	Alternative	Rank	Z
1	1	A	1	2.3
1	1	B	3	1.8
1	1	C	2	3.1
1	2	A	2	2.5
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Rank $= 1$ indicates most preferred alternative in each scenario

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It's a product of logit P's, where the choice set decreases as options are ranked:

$$\Pr\left(\text{Ranking} = 1, \ldots, J\right) = \frac{\exp\left(Z_{i1}\gamma\right)}{\sum_{k=1}^{J}\exp\left(Z_{ik}\gamma\right)} \frac{\exp\left(Z_{i2}\gamma\right)}{\sum_{k=2}^{J}\exp\left(Z_{ik}\gamma\right)} \cdots \frac{\exp\left(Z_{iJ-1}\gamma\right)}{\sum_{k=J-1}^{J}\exp\left(Z_{ik}\gamma\right)}$$

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- We now know the relative preference of the $J-1$ non-chosen options