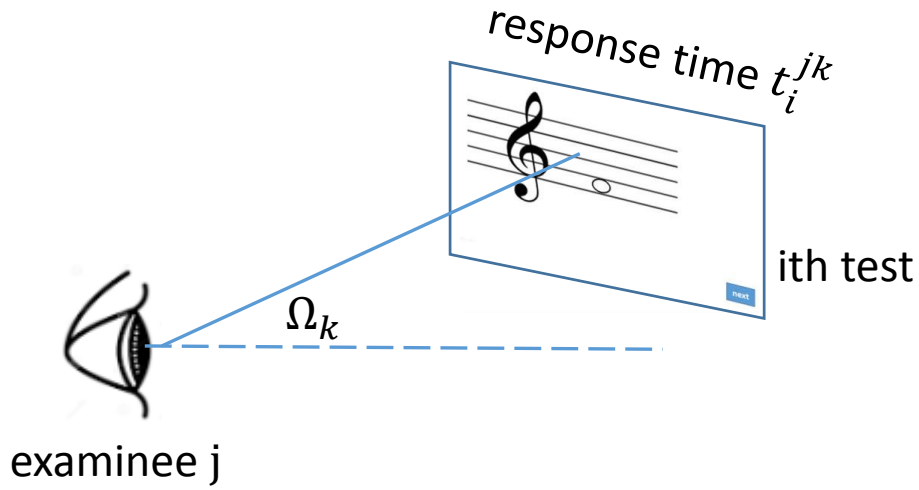
Experiment design:

For an examinee j at angle Ω_k, a set of N tests will be performed.

The performance will be collected as the response time t_i^{jk} $(i = 1, .., N)$

Indicator of response for the examinee j at angle Ω_k could be chosen as the average response time:

$$R_{jk} \equiv \left\langle t_i^{jk} \right\rangle_i \equiv \frac{1}{N} \sum_{i=1}^{N} t_i^{jk}$$



The response time will characterize the easiness of sight-reading at different angles. The longer the response time is, the harder it is to sight-read.

Our hypothesis: the response time will be longer at skew angles.

Input:

A keyboard that the examinee can press when seeing the test questions.

It will be synchronized with the computer to record the time to response t_i^{jk} and the correctness of the response c_i^{jk} $(t_i^{jk} \in \{0,1\})$.

Possible levels of hardness:

1. With or without mixed clefs.

2. With or without accidentals.

Other

For musically-illiterate examinee, the sight-reading can be changed by simple math problems such as the addition of 2-digit integers.