Traffic sign is essential for road safety as well as traffic efficiency. An effective sign should convey the message to its recipients accurately and efficiently. The word traffic sign in Hong Kong contains 2 languages: Chinese and English. The objective of the present study was to investigate whether the sequence of Chinese and English words would affect the effectiveness of different kinds of direction signs: namely the single-destination direction sign and multiple-destinations sign. Besides, the optimum position for processing in a multiple-destinations sign was investigated as well. It was found that the effect of language position was only salient in certain case.