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The Frequency Limits of the Binaural Phase Difference and Intensity Effects

G. W. Stewart
University of Iowa

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THE FREQUENCY LIMITS OF THE BINAURAL PHASE
DIFFERENCE AND INTENSITY EFFECTS

G. W. STEWART

ABSTRACT

The variation in localization of a phantom source with phase difference only at the ears and the variation with intensity differences only at the ears are here called the binaural phase difference effect and the binaural intensity effect respectively. That these variations follow according to law, the former linearly and the latter logarithmically, is not discussed.

INDIVIDUAL	LIMIT OF PHASE EFFECT	LAPSES IN INTENSITY EFFECT. OBSERVATIONS FROM 100 TO 1000
EMB	1360 D. V.	None
AETF	1335	850-1250
CICK	1119	None
HMH	1474	Over entire range
ML	1767	1450-2000
IK	1249	None
ES	1392	1450-1850
CRB	1333	850-1250 and 1550-2000
SC	1161	None
ERK	1146	1150-1250
CEL	1058	1450-2000
RK	1145	None
BWS	1248	850-1150
EGR	1151	None
ACR	825	1750-2000
GRW	1393	950-1850

The above table shows the results of experiments upon sixteen individuals. It is to be noted that the limit of the phase effect, or the frequency at which the phase effect ceases is approximately the same in all of the observers and that the lapses in the intensity effect seem to have no similarity. Experiments covered the range from 100 to 2000 d.v. Scattered experiments up to 4000 d.v. show no return of the phase effect but additional lapses in the intensity effect.

PHYSICAL LABORATORY,
UNIVERSITY OF IOWA.