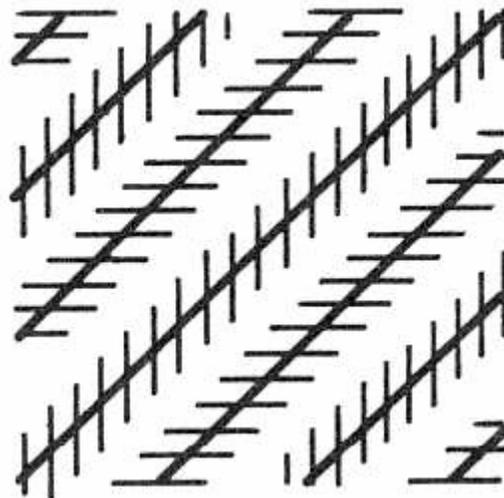
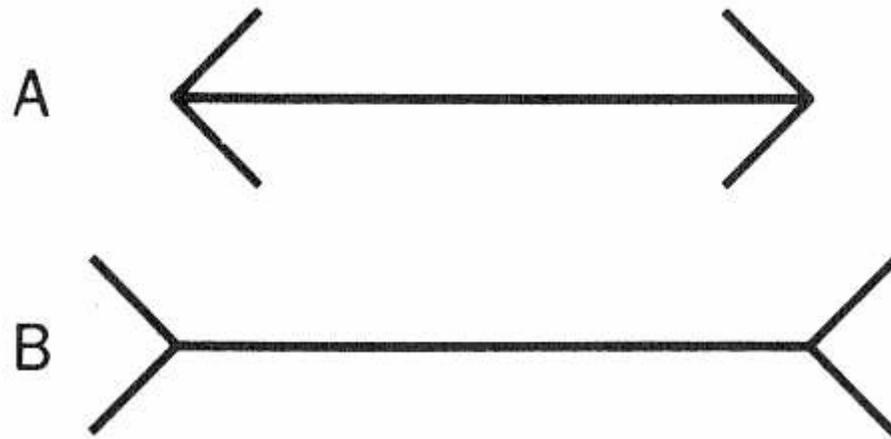
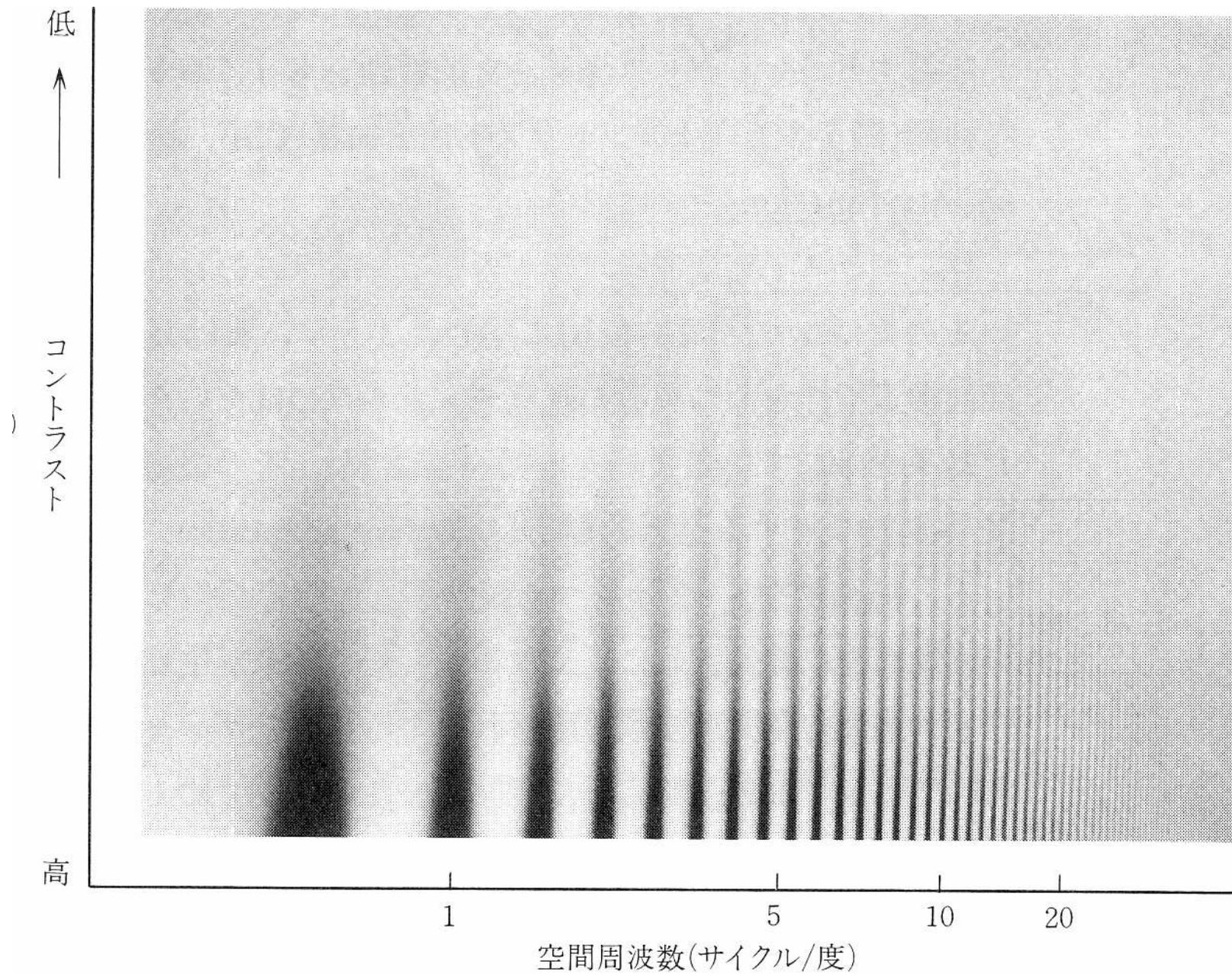


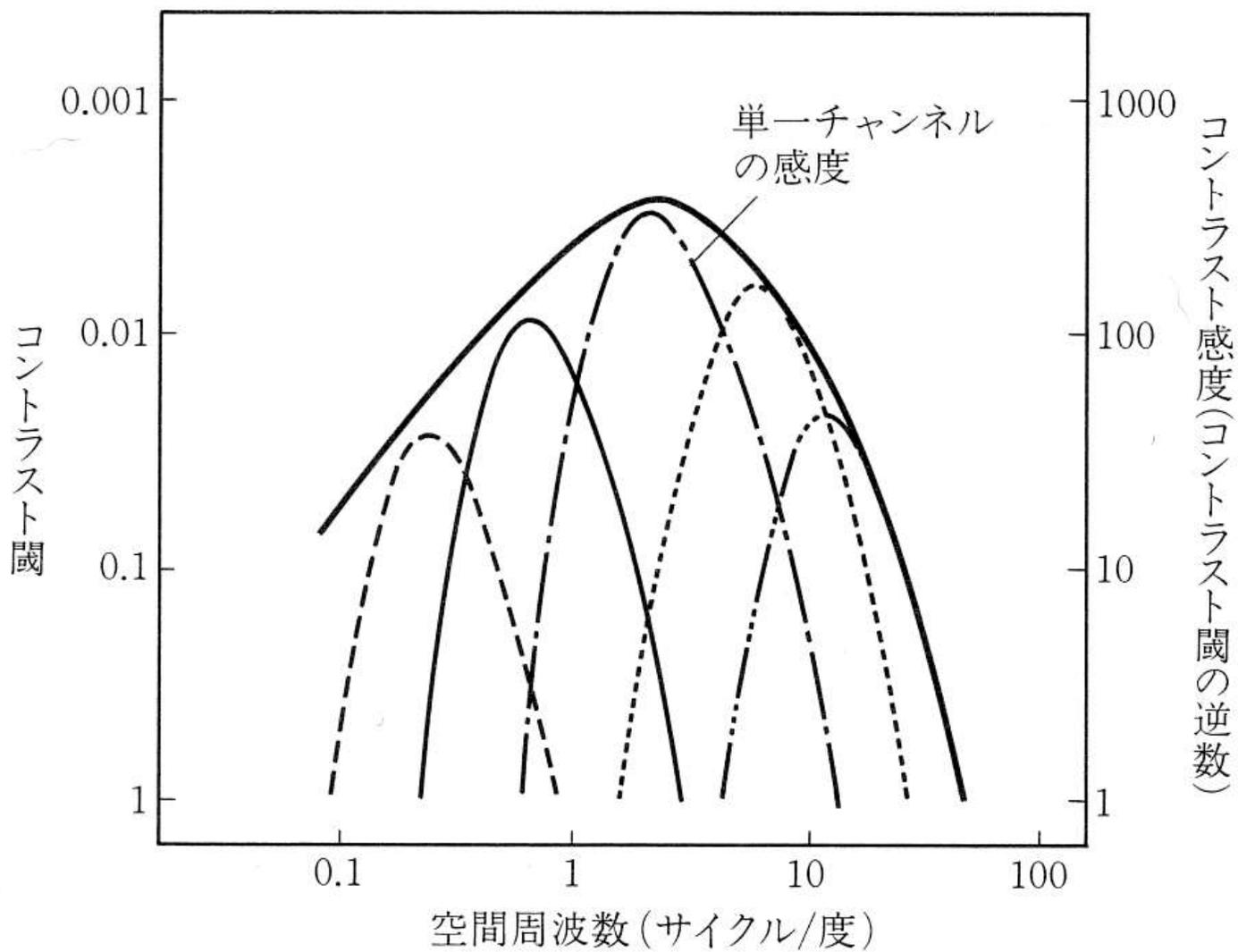
**心理学実験から
脳の情報処理を考える**

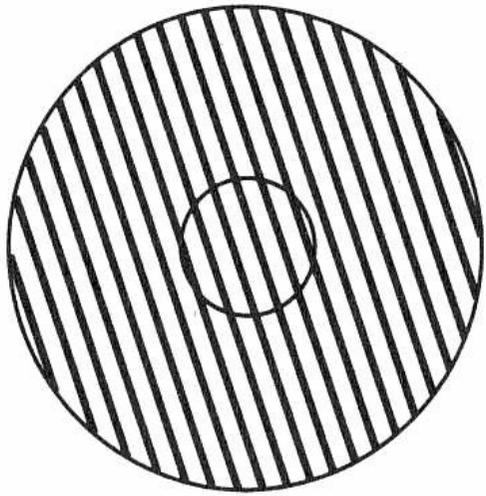
**森田ひろみ
図書館情報メディア研究科**



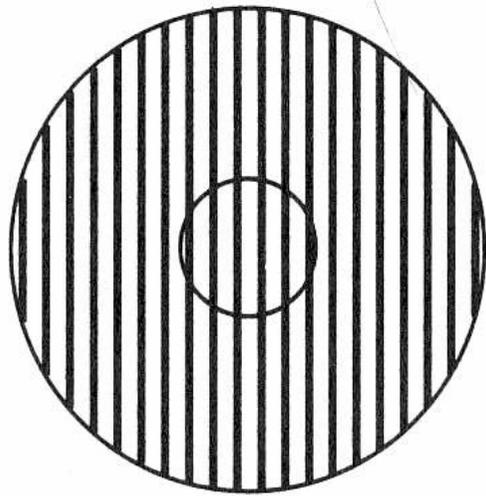


Cambell & Maffe, 1974

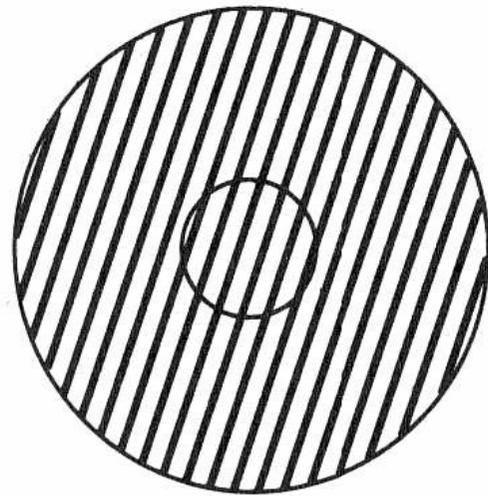




Adapt



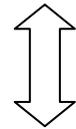
Test



Adapt

パターン知覚のマルチチャンネルモデル (Campbell & Robson, 1968)

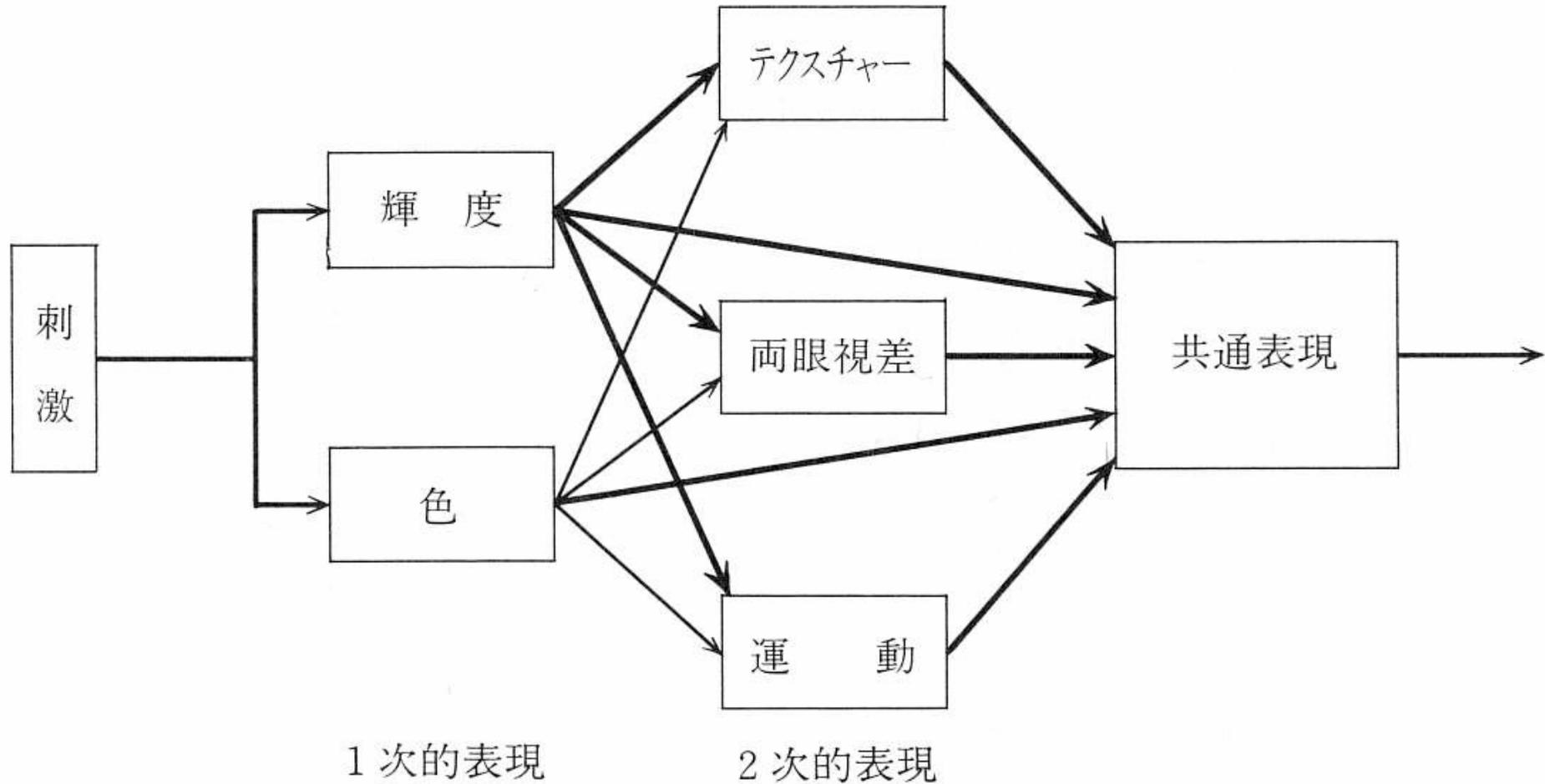
二次元の輝度パターン

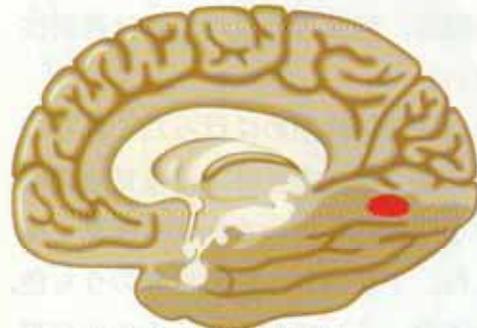
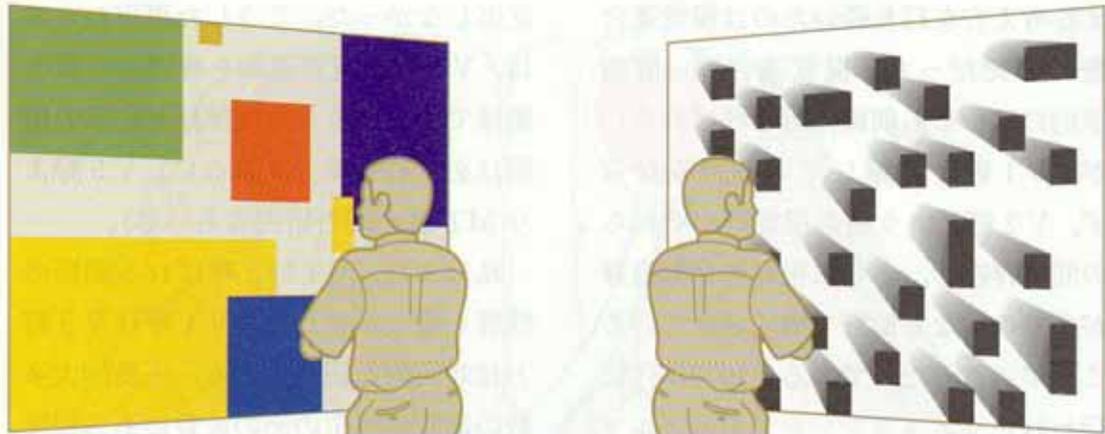


空間周波数、コントラスト、傾き、位相の異なるサイン波の集合

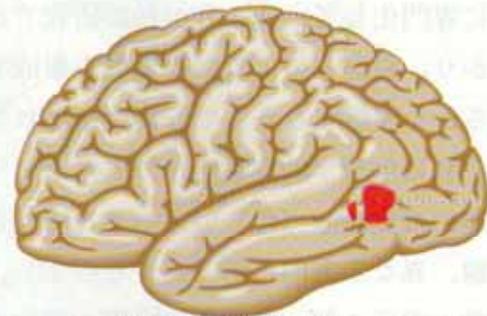


初期段階では属性ごと独立の処理





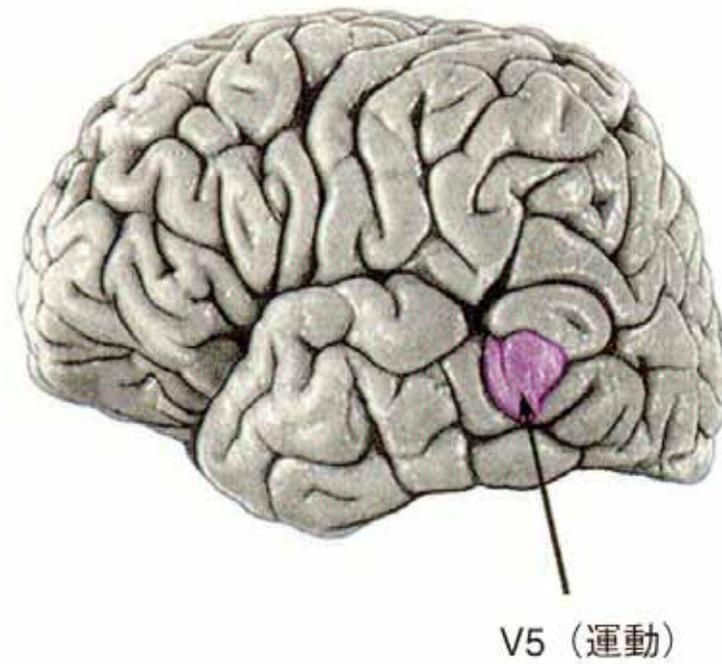
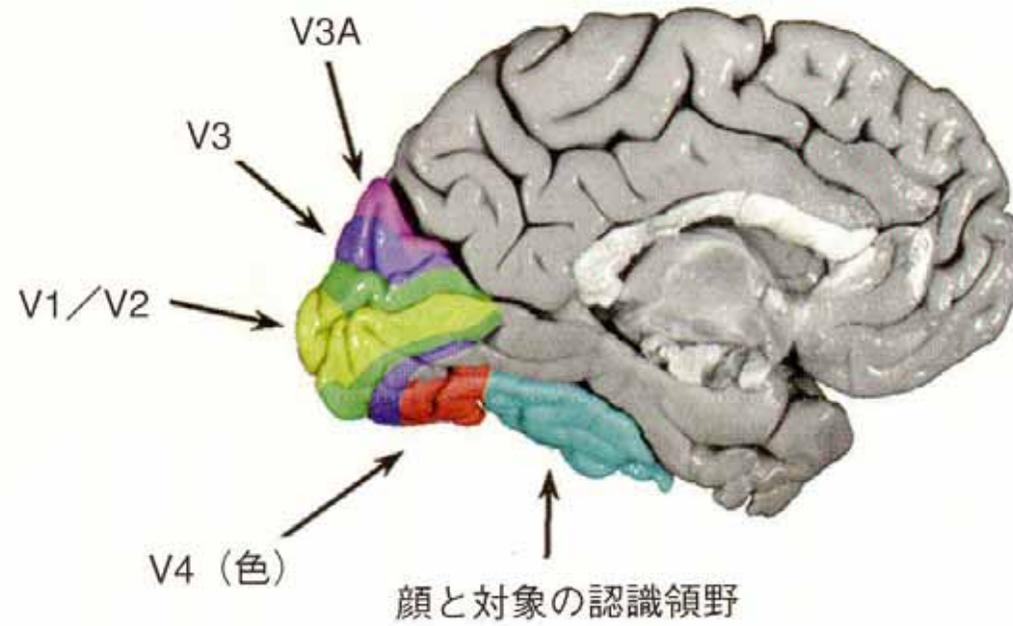
V4野が活動(縦断面)



V5野が活動(側面図)

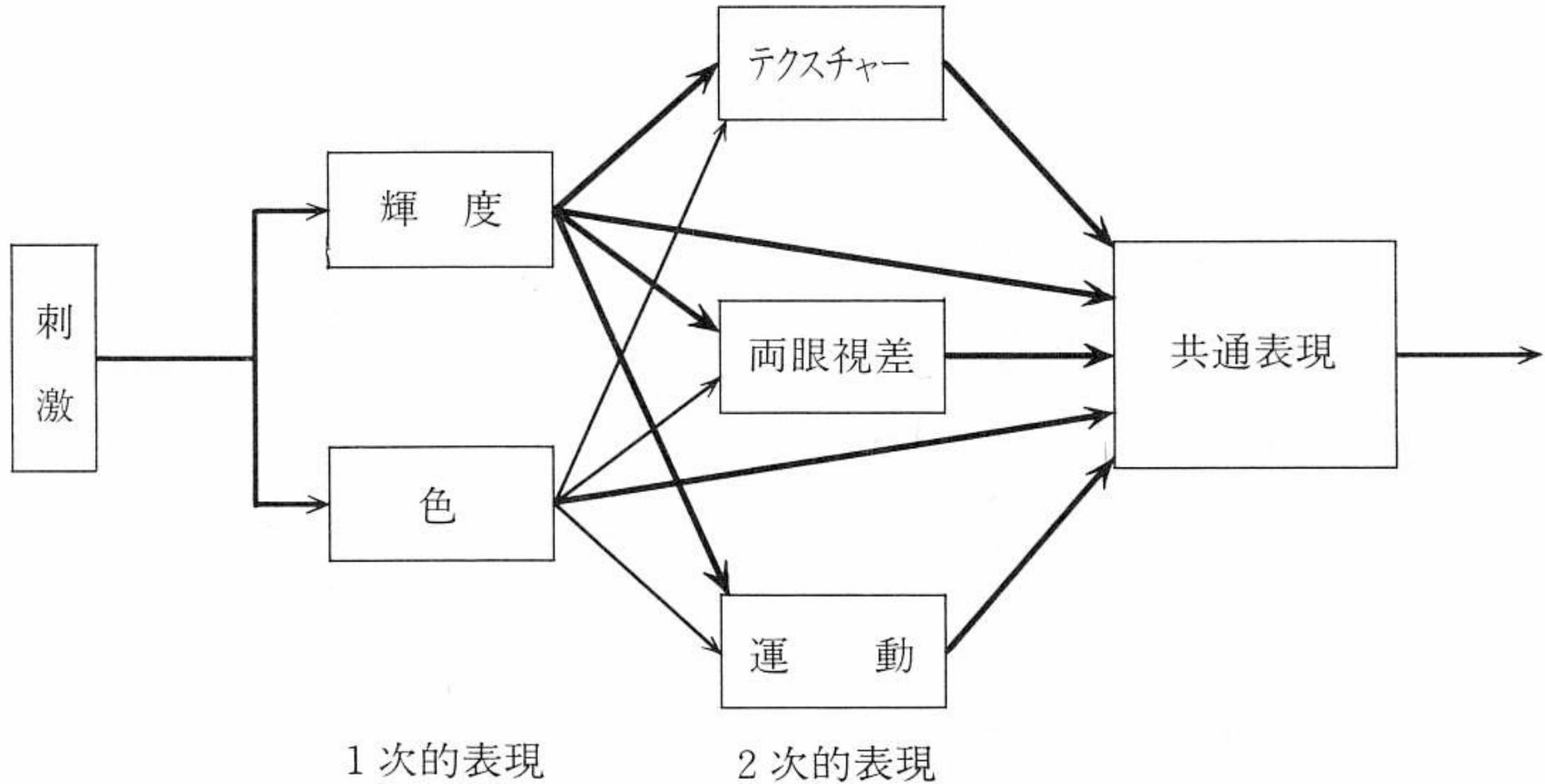


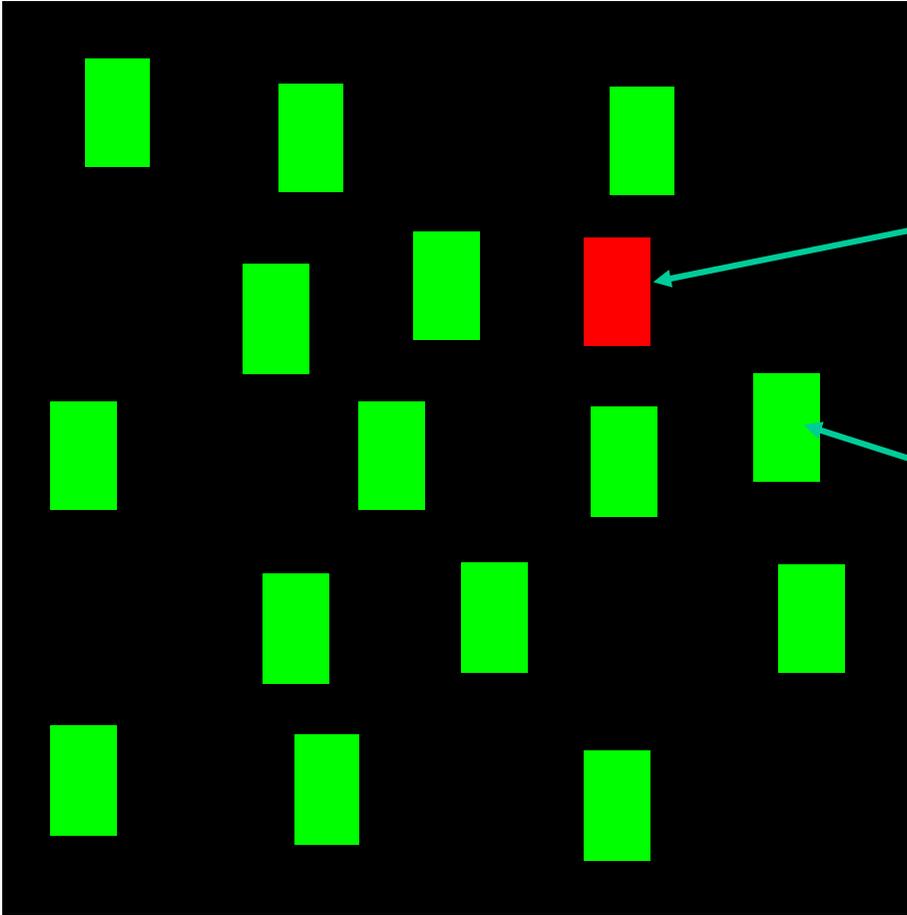
V1野とV2が活動(縦断面)





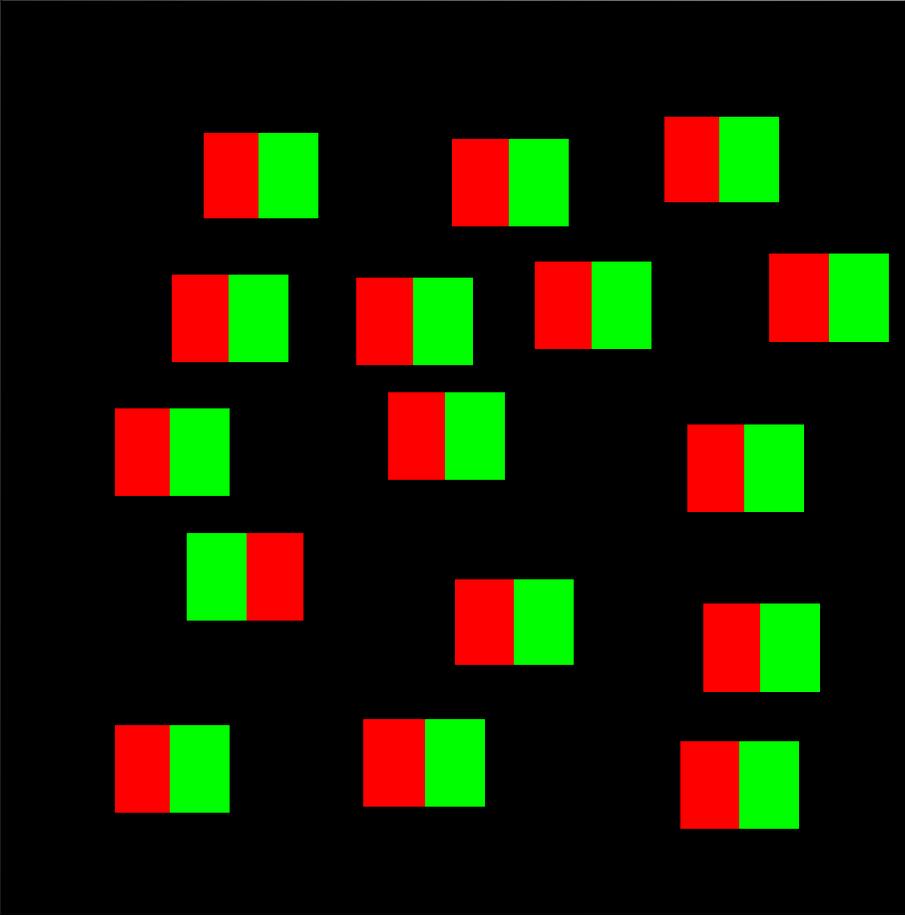
形の表現はどこに？



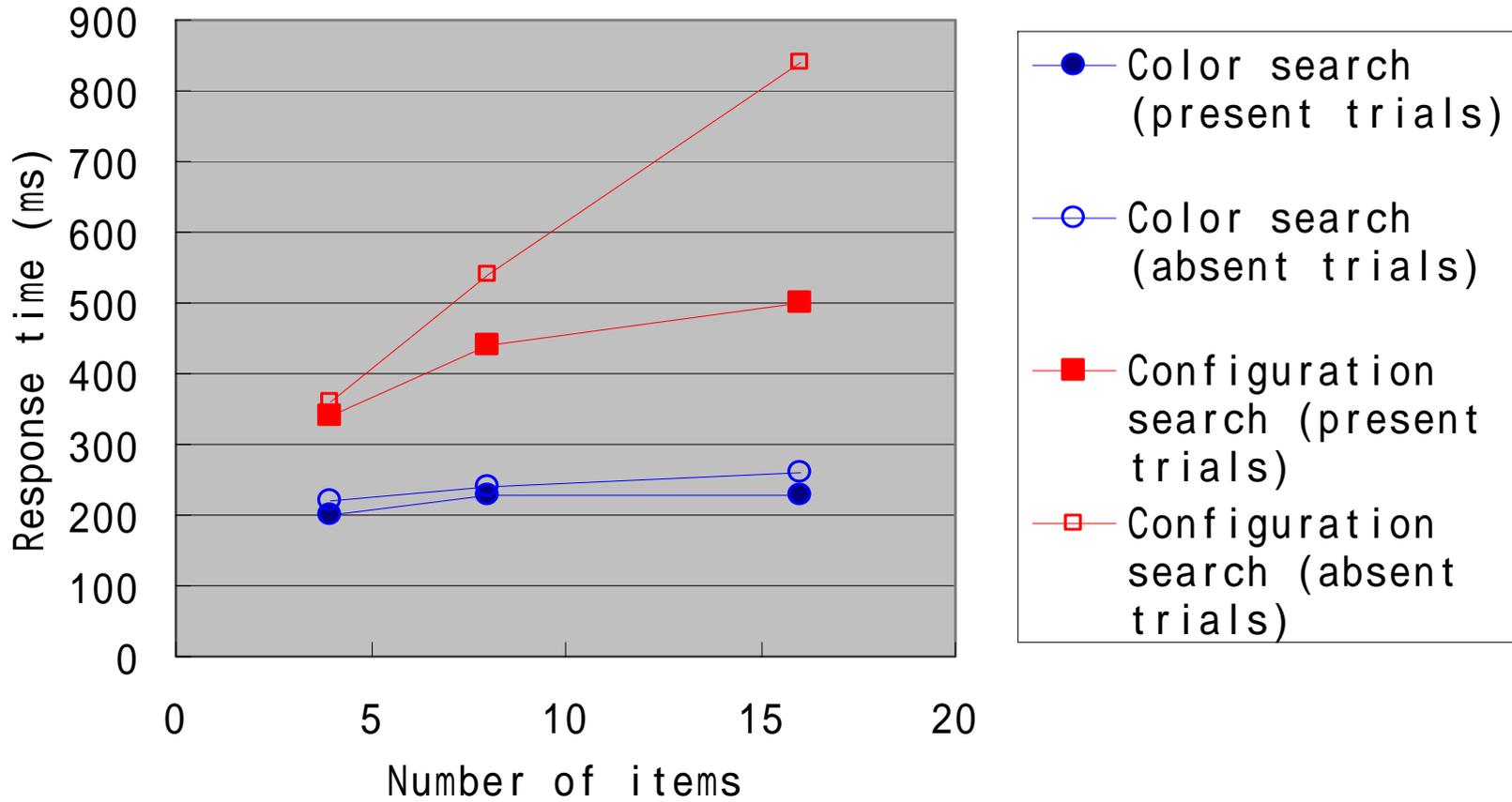


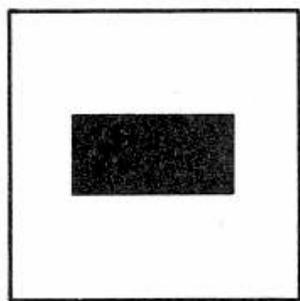
ターゲット
(目的刺激)

ディストラクタ
(妨害刺激)

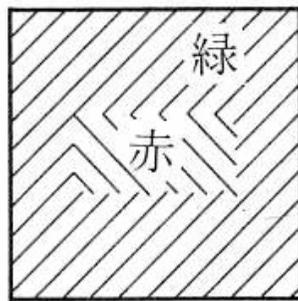


Result of color search & configuration search experiments

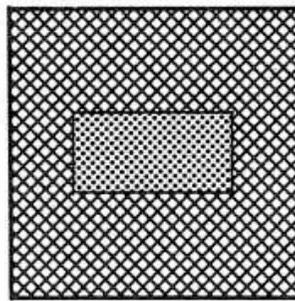




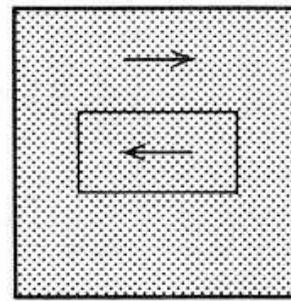
輝度



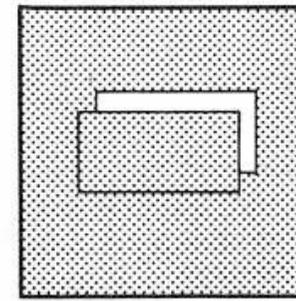
色



テクスチャー



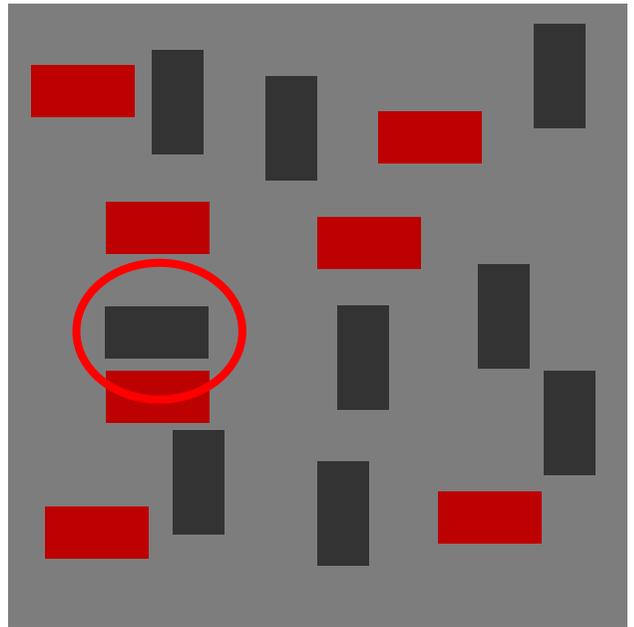
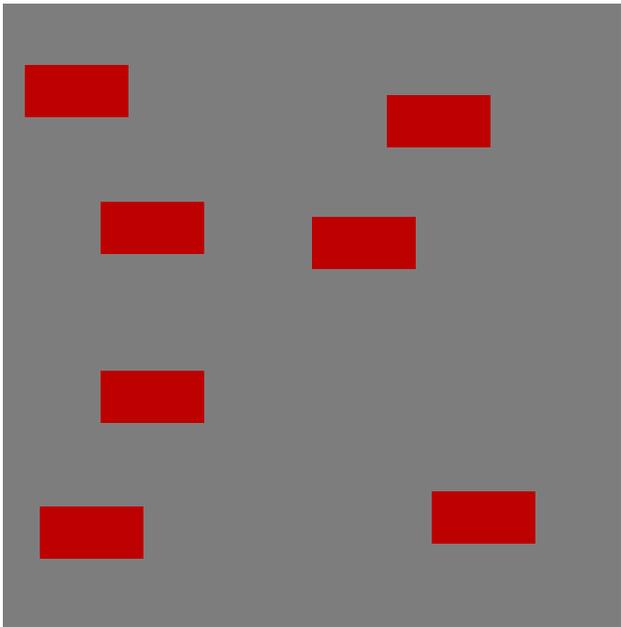
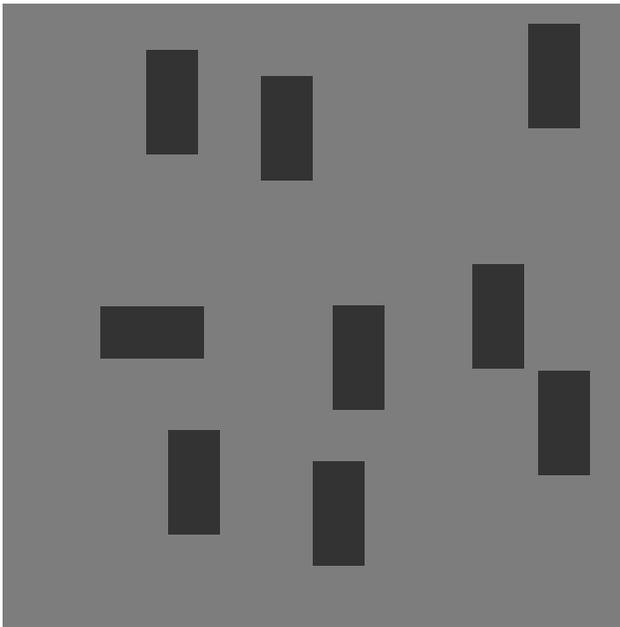
運動

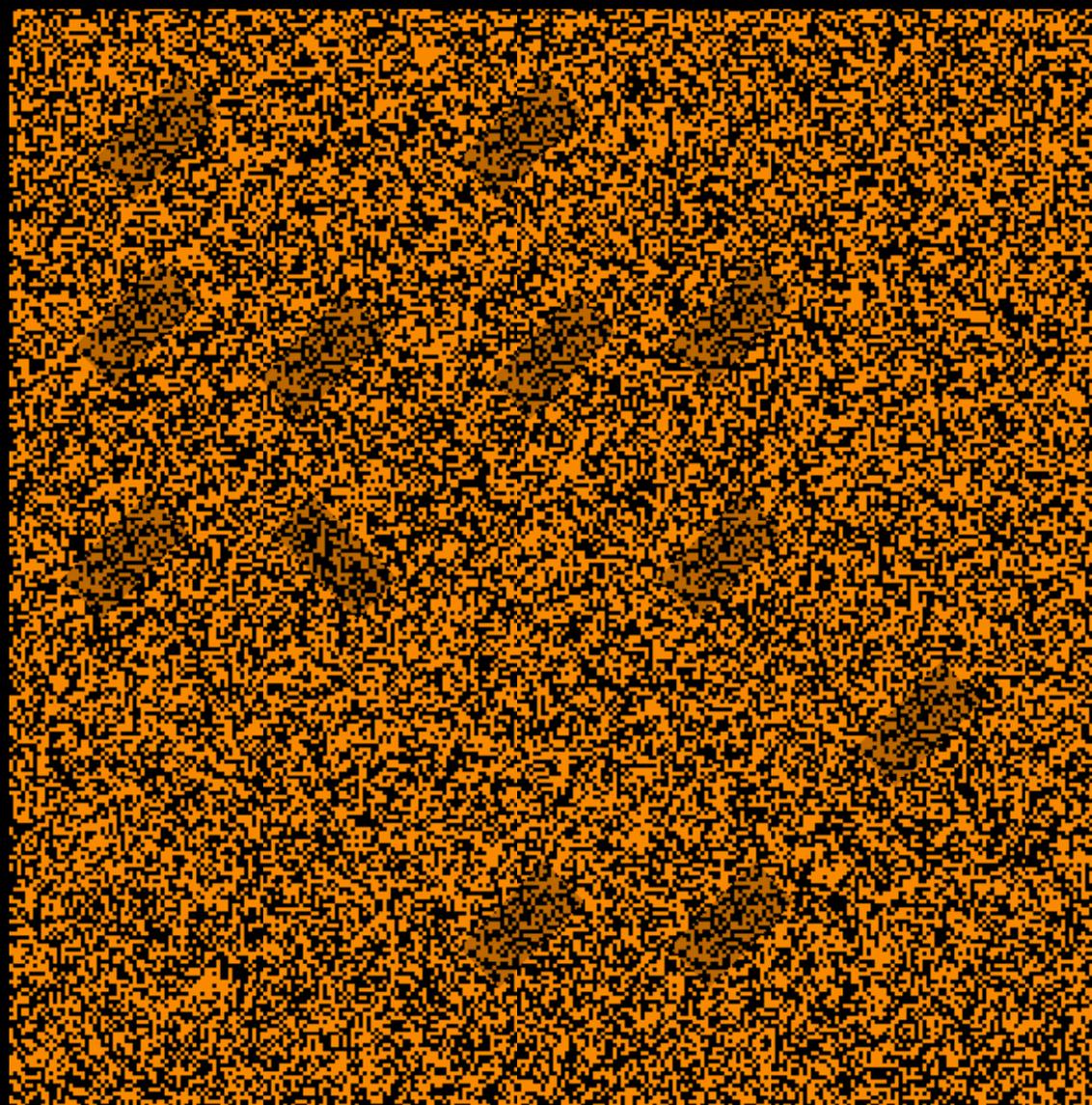


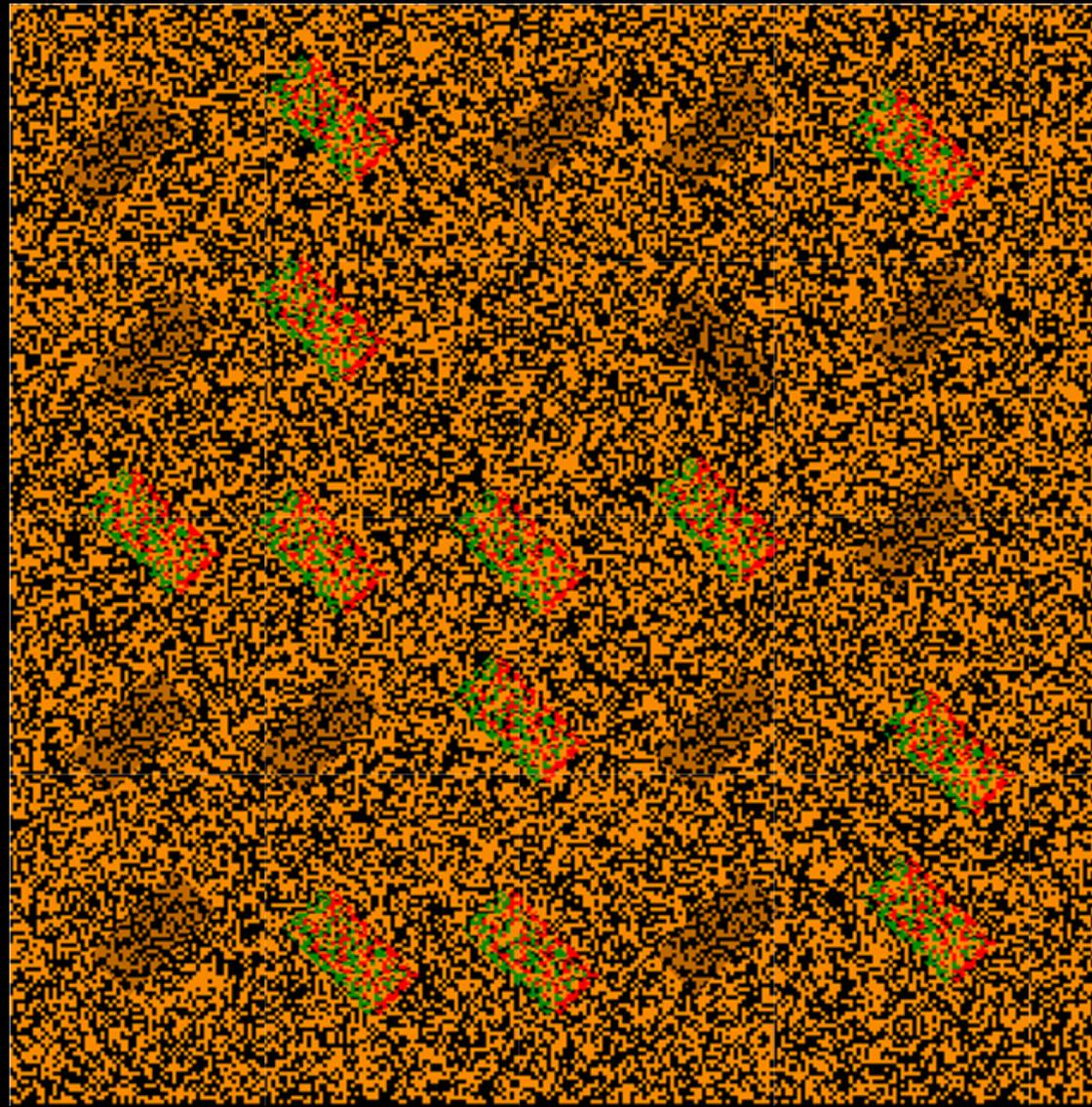
両眼視差

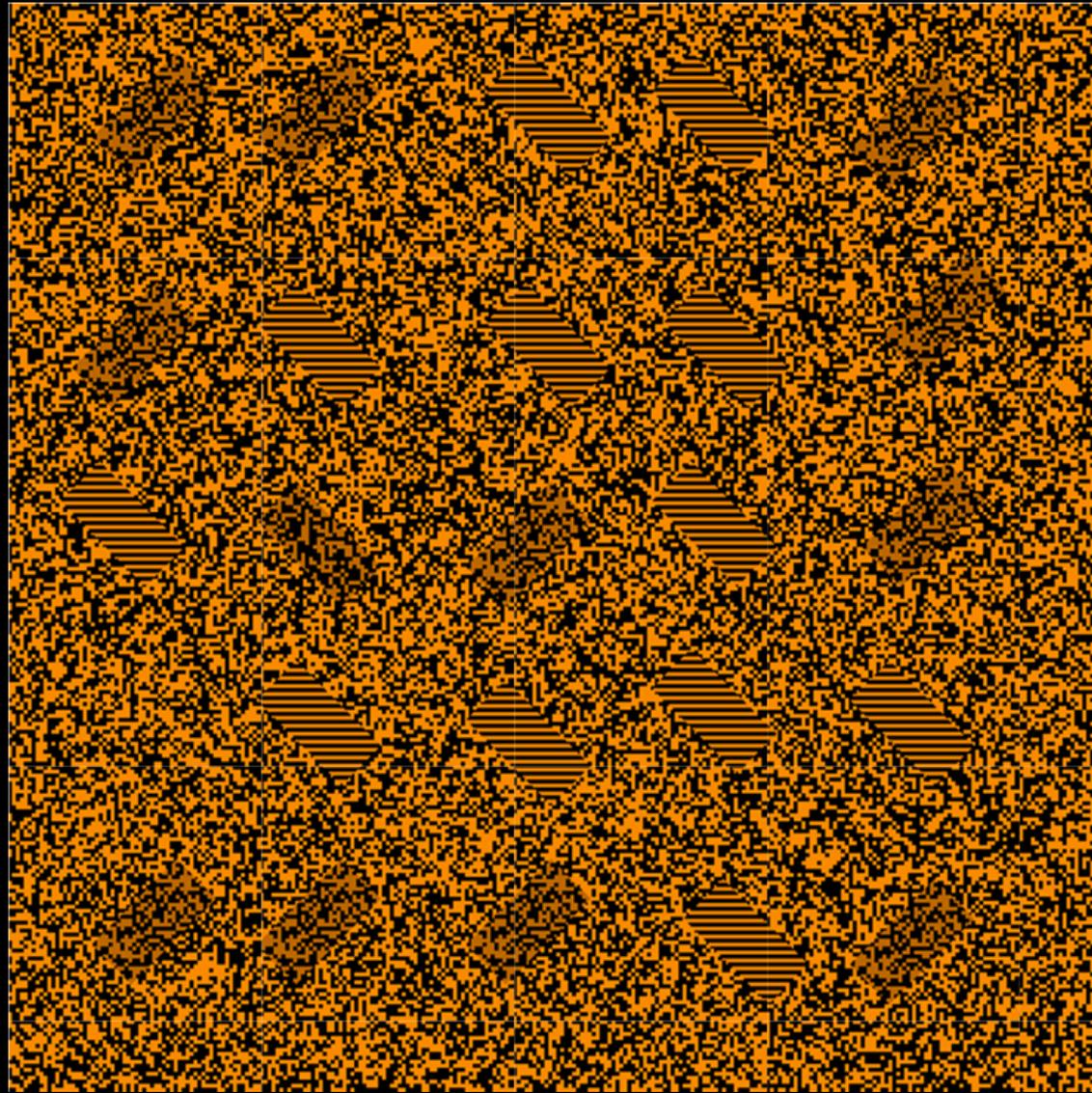
大きさあるいは傾きの異なるターゲットは並列探索

基本的特徴

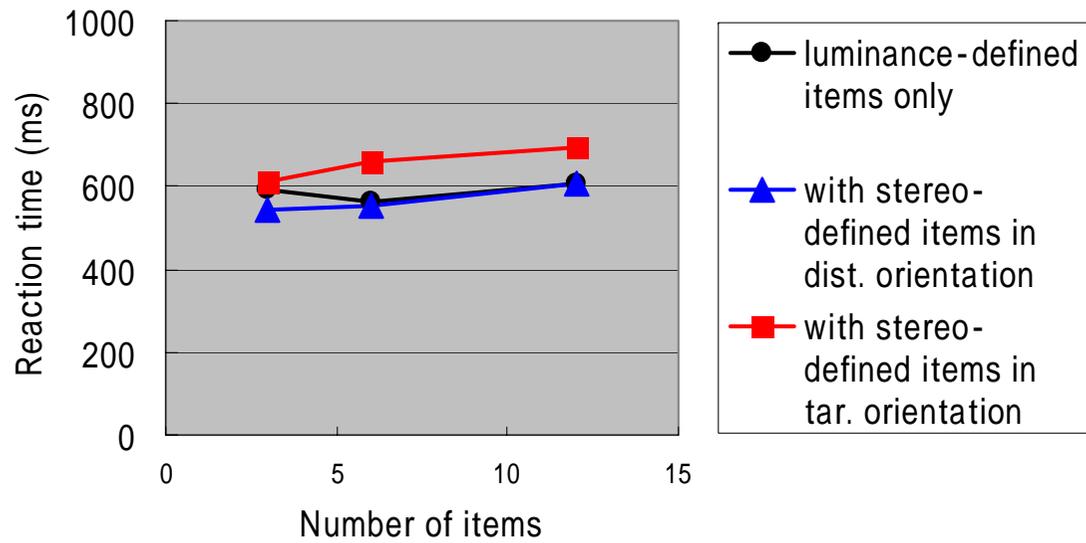




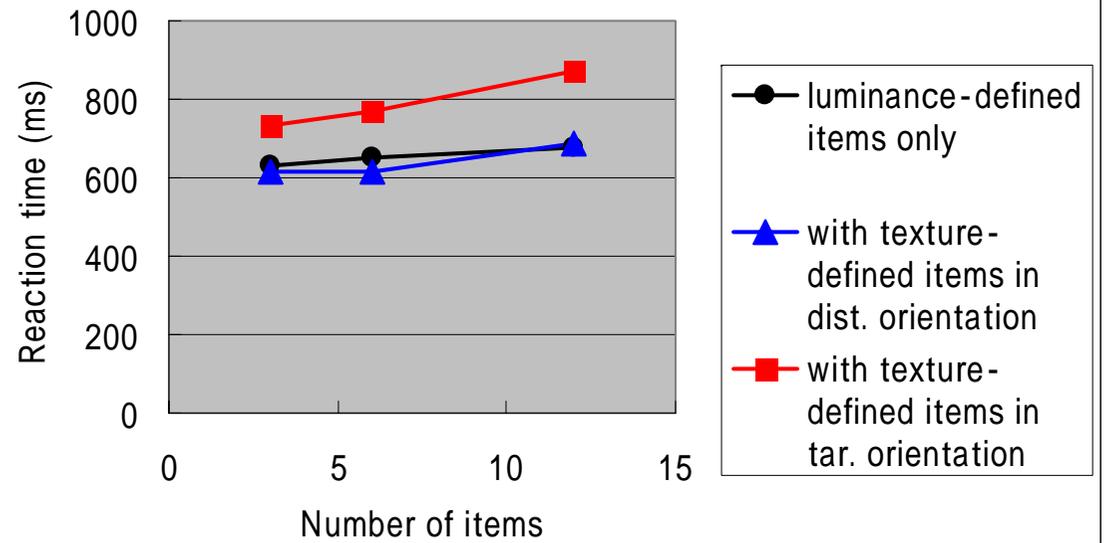




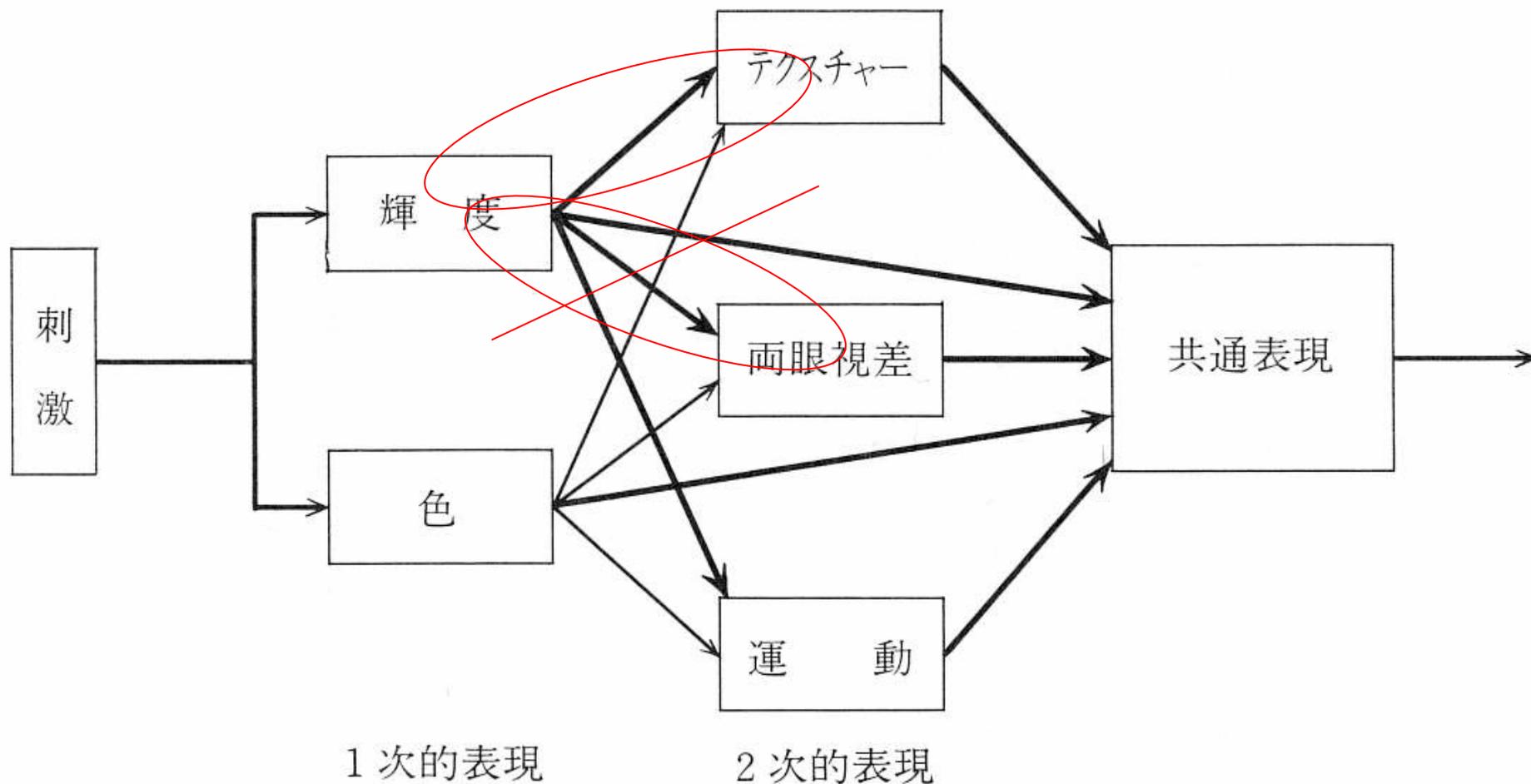
Luminance and Stereo



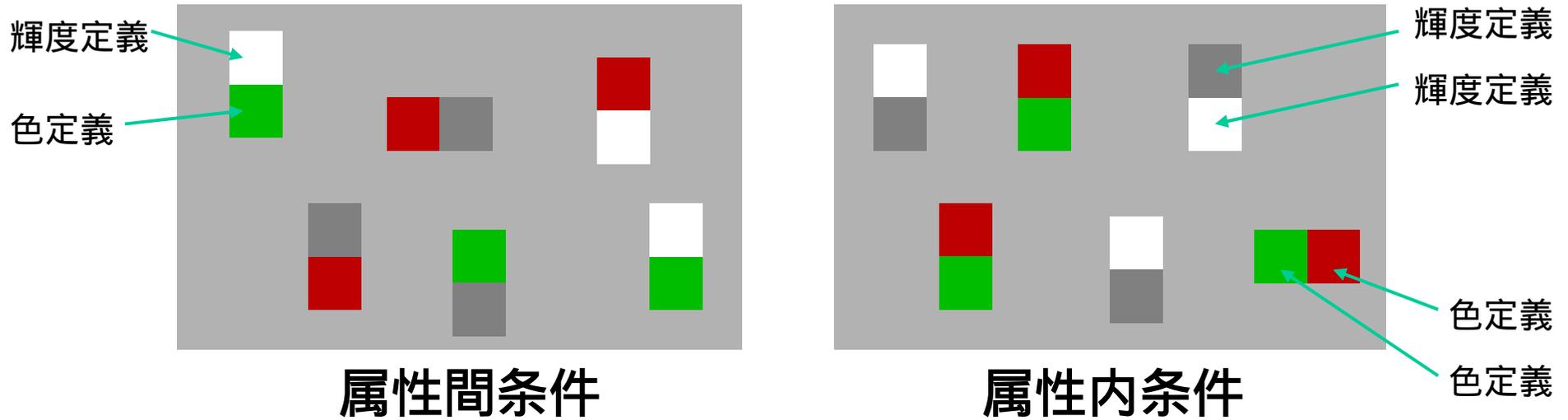
Luminance and Texture



形の表現はどこに？



異なる属性定義の部分からなる形の傾き探索実験



属性間条件
における探索関数

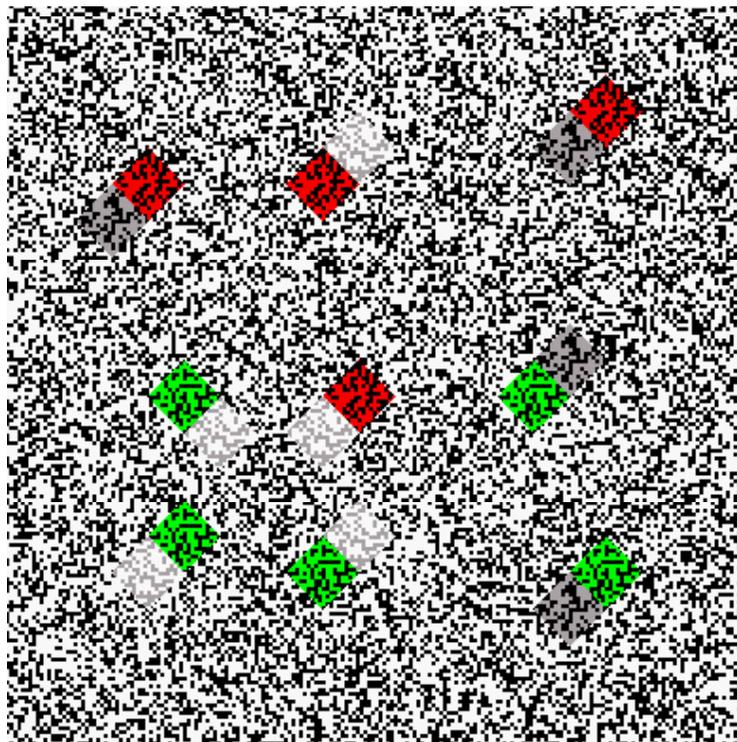
?

属性内条件
における探索関数

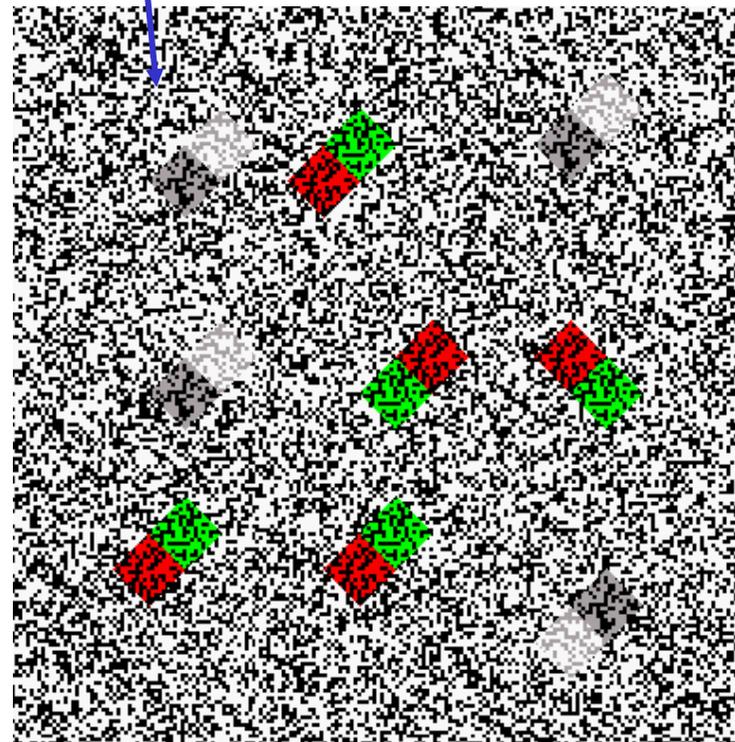
実験 1

探索画面

Random dot pattern (RDP, 15 x 15 deg)
with black & white dots (0.054 x 0.054 deg,
0.56 & 30 cd/m²)



Inter-attribute condition



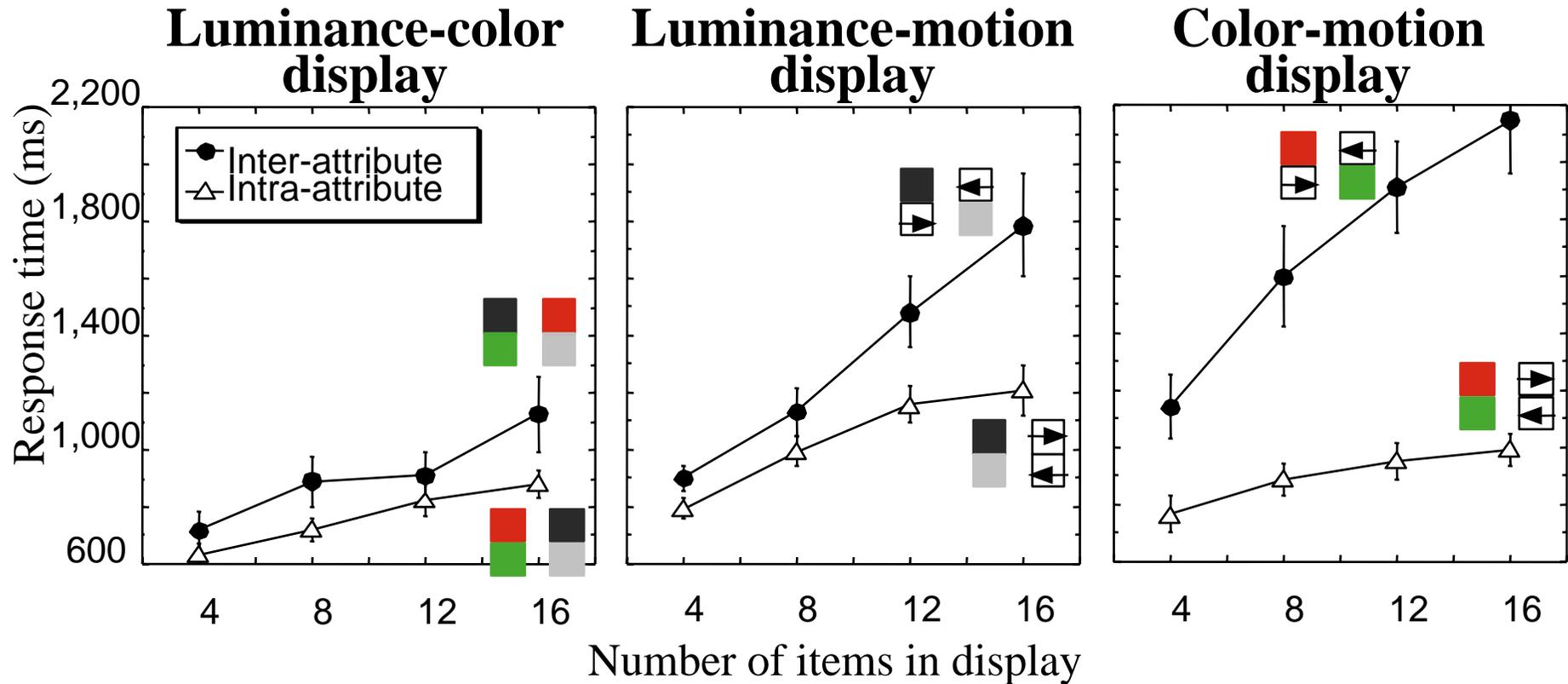
Intra-attribute condition

輝度定義正方形と色定義正方形を含む探索画面の例

被験者の課題は予め定められた傾きのバーを探索すること

結果

ターゲット有試行の正答の反応時間 (被験者12人の平均値)



slope (ms/item)	luminance-color	luminance-motion	color-motion
inter-attribute	31.27	75.12	83.4
intra-attribute	21.36	35.31	18.42

形の表現はどこに？

