

Comparing rapid scene categorization of aerial and terrestrial views: A new perspective on scene gist

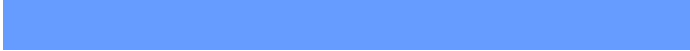
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that rapid categorization of terrestrial views, but not aerial views, is viewpoint dependent, as shown by a rotation effect for the former but not the latter. We

categorization of aerial and terrestrial views can enable us to identify those basic information sources and processes. Similarities between rapid categorization of aerial views and terrestrial views should highlight common



Experiment 3



Importantly, exactly the same principle seems to apply to viewing height (i.e., vertical distance) for aerial-scene views. In a pilot study, we asked two viewers to select 30 “good” views of 3-D-modeled mountains and stadiums in Google Earth and record the “eye

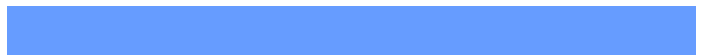
from the random effect of the participants.³ However,

measures, with more perceptually similar categories being more frequently confused with each other. We also assumed that confusions were symmetrical between categories of images and responses, and took the average confusions for symmetrical off-diagonal cells

~~(sgd, wsl, gain, ref, osv, 2.269, u05, vs7, 1.270, dgt, be, 3, n06, 91, ot, 2.68, s01, s3, B2, 01, fo, 1, 8, ch, i, n, g, d, l, w, e, e, s, f, i, n, i, s, h, (, b, a, i, n, e, d, 5, C, a, t, h, e, f, l, y~~

As in the MDS analysis, the main diagonals (i.e., correct responses) were omitted from these analyses. The confusion matrices provided a Pearson's $r(88) = 0.562$, $p < 0.001$, 95% confidence interval (CI) [0.40,

available from the amplitude spectrum for discrimi-



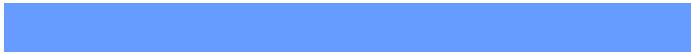
by gravity on human views of terrestrial scenes. This is clearly present for terrestrial views of scenes (Gregory

Essock, 2004). We will call this the orientation-bias hypothesis.

Finally, if there is an interaction between scene configuration and oriented amplitude in scenes, then we should expect the greatest decrement in performance to occur when both of these parameters are the furthest from the 0° upright viewpoint (Figure 7C). Rotating a scene 135° would produce the greatest impairment of performance, because it would rotate the scene layout

performance scores (i.e., . 2 standard deviations below

As shown in Table 3



Design and procedure

The design and procedure in Experiment 3

S1 and S2). The response biases in the texture condition should artificially increase the hit rates for the biased



for terrestrial views). While that model is widely regarded as successful in generating texture images, it seems different in various ways from the conception and operationalization of texture previously argued to



consistency in object and background perception.
Psychological Science, 15(8), 559–564.

Davies, C., Tompkinson, W., Donnelly, N., Gordon,
L., & Cave, K. (2006). Visual saliency as an aid to

ploring aerial and terrestrial scenes. In M. Buchroithner, N. Prechtel, & D. Burghardt (Eds.), *Cartography from pole to pole* (pp. 421–430). Berlin:

