curve as the solid line. Not only did the model produce a satisfactory fit to the data, but the constants k_2 and k_4 increased continuously, going from lower to higher background illuminances. Thus as the neutral adaptive state of the fovea is increased, the amount of interaction between red- and green-receptor response increases.

Our data appear not to require summation between chromatic response mechanisms. The only type of receptor interaction that we need, to account for the variety of threshold data presented, is the linear subtractive interaction between the two classes of cones in channels 1 and 2—the red and green response mechanisms. In presenting this evidence, we enter a long-standing controversy between the additive color theory in which "brightness" is ascribed to the summed responses of the chromatic response mechanisms and the opponent color theory in which "brightness" is ascribed to a black-white mechanism totally separate from the chromatic response mechanisms. Ours is a limited statement which we mean, at this time, to apply only to explaining increment and absolute spectral thresholds.

Electrophysiological studies have established two general classes of responding units in the visual systems of fish and primates—(i) those that respond undirectionally with increased or decreased activity throughout the spectrum with a broad single peak and (ii) those that respond in one way over a narrower spectral region and then a reversed way over another region, indicating opposing interaction of two receptor classes. The former have been ascribed a "luminosity" or "brightness" function because of the loosely established correlation with the "luminosity" curve, although detailed correspondence over an experimental parameter such as intensity has not been shown. It appears from our results that for primate foveal vision, over the entire range from fully dark-adapted to very intensely light-adapted conditions, such separate "luminosity units" are not needed to account for spectral sensitivity at threshold.

In summary, the human threshold data over the range from a fully dark-adapted fovea to one that is highly light-adapted (to 10,000 trolands), which comprises nearly the entire adaptive range of rod-free vision, and the monkey data, for neutral and spectral adaptations over wide intensity ranges, do not reject the null hypothesis as stated in the model of Eqs. 1, 2, and 3.

1) There is linear subtractive interaction between the response of the cones containing the photopigments P575 and P535.

2) The narrow peak at 530 to 540 nm and the displaced and narrow peak at 610 nm are accounted for by this interaction.

3) There is no interaction between the red, green, and blue channels described by Eqs. 1, 2, and 3, respectively.

4) The peak near 445 nm is accounted for by the action of a single class of cones containing P445 without interaction with another class of cones.

5) Only three classes of cones are required to account for these data, and their absorption spectra, as measured by microspectrophotometry, represent their functional sensitivities well.

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Lunar Anorthosites: Plagioclase Crystallization

In our report on elemental abundances in lunar anorthosites (*1*), we stated (*1*, p. 971): "Smith *et al.* . . ., assuming a modified (low-Fe) chondritic composition for the moon, suggested that plagioclase crystallization began after ~ 50 percent of the magma had solidified" (*2*). This statement resulted from our misunderstanding of the paper by Smith *et al.* (*2*). Their statement, that plagioclase crystallization began after ~ 50 percent of the magma had solidified, is valid for lava crystallization at the Sea of Tranquillity (that is, it is a late local effect) but not for the whole moon, as we suggested. Furthermore, Smith *et al.* (*3*) suggest that about 80 percent of the whole moon crystallized into olivine and pyroxene before plagioclase crystallized from the residual basaltic magma.

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