common motion, or some system possessing this common motion, is used as a frame of reference for the "remaining" motion. The mechanics of this frame of reference is, however, generally left undefined. If the assumption of independence of the pursuit extraretinal signal and the retinal signal is accepted, it follows that one quite natural way of performing motion analysis would be the ocular pursuit of the "common" motion. The retina itself would then serve as a frame of reference for the "remaining" motion. When the eye follows the translatory component of a rolling wheel, the points at the rim will describe a circle relative to the retina. The circular component would thus be carried by the retinal signal, while the translatory component would be carried by the pursuit extraretinal signal. Both these components would remain distinct in perception because of the independence of the two motion signals.

6. If the background of the pursuit movement is a normally illuminated room, most Os agree that the background seems to move, in some sense, but does not change position. This indicates apparently perfect position constancy. Perfect position constancy would indicate 100% compensation for eye

movement, though in this case it seems likely that it comes about simply through the tendency of a large visual stimulus to assume the role of stationary frame of reference (cf. Duncker, 1929). Position compensation during pursuit has been measured (Stoper, 1967; Experiment II), using small briefly presented background stimuli, and found to be almost nonexistent. It would be expected that position constancy would increase with size of the background stimuli, though this was not investigated systematically. The results of a recent experiment, using larger background stimuli (Mack & Herman, in press), do indicate a much greater degree of position constancy during pursuit. The retrograde motion seen during the Filehne illusion, however, is evidence that even if the background stimulus fills the entire visual field and produces apparently perfect position constancy, many Os will nevertheless report motion of the background.

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ERRATUM

Beck, J., and Stevens, A. An aftereffect to discrete stimuli producing apparent movement and succession. *Perception & Psychophysics*, 1972, 12 (6), 482-487.—Page 482, Column 2, line 40, the sentence beginning "An O was told to fixate. . ." should read as follows: "An O was told to fixate at all times on a red neon light (NE 51), which was constantly in view and was placed 2 in. about the midpoint of the two stimuli. On page 485, Column 2, line 23, should read as follows "It is unclear why In Condition D, with a 2-in. separation, there was a tendency to judge the ISI of the test stimulus as greater."