

## CRITICAL REVIEWS AND DIALOGUES

# Editorial introduction to Greenwood/West dialogue

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Although a U.S. Presidential Proclamation designated the 1990s “The Decade of the Brain,” not all cerebral constituents shared equally in the limelight. By anyone’s accounting, the prefrontal cortex was the darling of clinicians and neuroscientists throughout the ’90s, with everything from schizophrenia and anorexia nervosa to pathological gambling and the emergence of artistic skill attributed to “frontal lobe dysfunction” (David, 1992; Miller et al., 1998; Rugle & Melamed, 1993). It should come as no surprise, then, that that most universal of cognitive afflictions, aging, should be linked to changes in frontal cortex.

Cognitive psychologist Pamela Greenwood, of the Catholic University of America, takes a long, hard look at the evidence for selective changes in the frontal lobes with aging. Citing experiments on working memory (a putative “frontal function”) and visuospatial attention, face recognition, and implicit memory (“nonfrontal functions”), as well as results of structural and functional neuroimaging, she ends up rejecting a “strong form” of the frontal aging hypothesis. University of Notre Dame psychologist Robert West, a proponent of a major role for prefrontal cortex in age-related cognitive deficits, issues a rejoinder to Greenwood. His view—

that age-related declines in cognitive operations highly dependent on prefrontal cortex emerge earlier and are more severe than those not so frontally mediated—might be called a somewhat weaker form of the frontal aging hypothesis, but is one that finds much empirical support. Both authors call for further research, with greater theoretical and methodological specification of cognitive processes and cerebral circuitry involved.

The spirited dialogue that follows will surely stimulate much discussion and empirical research as neuropsychology enters the 2000s, “The Decade of Behavior.”

## REFERENCES

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