

THE WONDERS OF HUMAN BEHAVIOR

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The human being inherits a design which includes abilities for many different actions and sorts of performance. These innate abilities cannot, and do not, guarantee anything more than the most basic behaviors which are determined by the structural and functional limits of the mechanisms involved.

The ultimate behavior of the human far exceeds the innate performance of the mechanisms, and is the product of experience. This experience is the product of the individual's personal development. In the very complex sequence of living in an environment containing many physical and chemical forces, the individual's development is the product of what each person does in using, organizing and integrating all the responses to the environmental forces--the organization and integration that comes from the use and applications of these inheritances. Thus, the inheritances provide no guarantee of human behavior--they can only provide the mechanisms for the opportunities to become a unique individual through the very complex series of cognitive events known as the learning process.

There is no more splendid, nor spectacular, example of all this than the evolution of the measurable and appraisable visual abilities in the human. Here is the prime instance of the innate mechanisms beautifully designed for elaborate responses to the impacts of light. Yet, there are numerous visual abilities which cannot be traced, nor sensibly attributed, simply to the design of the two end organs--but can only be fully explained and appreciated as the product of the learning process which goes far beyond the anatomical and physiological components of the two globes set in the ocular orbits in the front of the human head. To be specific: such visual abilities as the discriminations and judgments of size, shape, texture, weight, density and temperature cannot possibly be explained by any simplistic idea of a retinal imagery that supposedly impinges upon the fovea. Likewise, the visual

ability identified as depth perception cannot be fully explained by simply crediting it to disparation of two retinal images. The abilities of visual spatial judgments demonstrated by the individual with only one eye vividly remind us of the 1845 statement by Helmholtz that: "The human's ability to judge spatial distances is much more a product of movement experiences in and through the lighted world than it is from such explanations of disparate images on the retinae of two eyes." And--these are but two of the most obvious of the visual abilities that extend far beyond those that can be credited to the mechanisms of sight.

The greatest of all challenges to clinicians in any discipline is the opportunity to so influence another person's developmental progress so all of the potentials for intellectual and cultural performance are extended and enhanced beyond those levels that sheer coincidental happenstance might bring. The contemporary optometrist now finds that the judicious prescription of lenses, prisms, visual training and experiential application of the new visual abilities can bring significantly positive gains in every aspect of the patient's cultural behavior. Thus, the informed optometrist finds that vision can become the dominant process in the

development of the individual at any age when the individual desires such gains, and diligently follows the recommendations of the optometrist. All this brings the indisputable recognition of the plasticity of human behavior and the ultimate intellectual and cultural performance abilities every individual can have if desired and sought through the use, practice and applications of the relevant learning processes made available to him, or her, by the optometrist.

What greater goal could any clinician have than the acquisition of the knowledge and skills to so assist those who seek self-improvement and self-advancement. The fact that the optometric profession has these opportunities makes it even more important that each member of the profession prepares himself, or herself, to meet the responsibilities that inherently lie within these opportunities. To paraphrase one of the greatest of all philosophers: "Much will be expected of him to whom such privileges are given."

What greater challenge can be given to all who live and practice the optometric profession--the clinical profession that now knows more about vision, and its relevance to human behavior, than does any other group of clinicians in practice today--and can provide clinical benefits no other group has even discovered?



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