

Developmental Issue

Hum. Dev. 25: 303–308 (1982)

Werner's Influences on Contemporary Psychology

Roy D. Pea

Bank Street College, New York, N.Y., USA;

Heinz Werner Institute for Developmental Psychology, Worcester, Mass., USA

Key Words. Developmental theory · Holism · Person-environment · Process · Symbolism · Werner

Abstract. A recent 2-day conference at Clark University on 'Developmental Psychology for the 1980s: Werner's Influences on Theory and Praxis' is reviewed. Synopses are provided of the presentations and panel discussions, which outlined findings of Werner-inspired research programs, as well as offering formulations of the contributions and future prospects of both Werner's comparative-developmental perspective and its recent extension, genetic-dramatism (incorporating Kenneth Burke's dramatic analyses of human action), for psychology and a diversity of practico-theoretical disciplines. A key issue raised concerned the pressing need for interdisciplinary methods and research efforts that will provide understanding of the person-environment system as a dynamic, functioning *whole* being.

A conference on 'Developmental Psychology for the 1980s: Werner's Influences on Theory and Praxis' was held at Clark University, Heinz Werner Institute for Developmental Psychology, Worcester, Mass., June 1–2, 1981. A monograph which captures the principal themes of the conference papers and discussions is in preparation by the two conference organizers (*Wapner and Kaplan*).

After 14 years of the distinguished Heinz Werner Lecture Series, in which major theoretical syntheses were presented by *von Bertalanffy, Piaget, Bruner, Jakobson, Waddington, Burke, Dubos, Harris, Kaplan, Hunt, Witkin, Loevinger, Kohlberg, and Schafer*, this conference was designated to

explore both the impact and future roles of Werner's emphases on a holistic-developmental approach to human functioning. These concerns were approached from content areas as diverse as aesthetics, critical life cycle transitions, environmental design, figurative action, infant cognition, and neuropsychology, by scholars working in the Wernerian tradition, including many of Werner's students and colleagues.

The first session was entitled 'Theoretical Extensions and Clarifications' and began with a presentation by *Sandor Brent*. Concerning himself with the relationships between the growth of a structure in size, and its development (in terms of increasing differentiation and hierarchic integration), he utilized changes in the size of classrooms as an exemplary case of relating growth to developmental changes in the forms and functions of constituent parts of the classroom structure with respect to the forms and functions of the classroom as a whole. Extensions of the model to task-oriented small groups, urban centers, skill learning, and cognitive structures were suggested.

Joseph Glick then discussed differences between Werner, Piaget, and Vygotsky, in terms of a distinction between the 'conceptual objects' (theoretical topics) and the 'natural objects' (e.g. children, societies) of their theories. Piaget's conceptual object is said to be the relationships between experience and the characteristic forms of rational thought, Werner's that of utilizing a vectorial language of dynamic forces to reveal the relationships between psychological functions and their organismic, holistic basis in *process* terms. Two Vygotskys were distinguished: the conceptual object of the first (*Thought and Language*) being the dialectical relationship between socialized systems of mediation and the individual's private reconstruction of these, whereas that of the second (*Mind in Society*) is the internalization by the individual of socially constructed representational systems which are initially revealed interpersonally. *Glick* then emphasized the need for a developmental psychology that deals with the 'whole child', a task best suited to Werner's perspective.

Bernard Kaplan argued for a radical reorientation to developmental psychology which he designated as genetic-dramatism, and which integrates Werner's organismic-developmental conceptions (especially the emphasis on an a priori conception of 'development', not to be conflated with history) and Burke's agenetic analytic categories of agent, act, scene, instrumentality, and purpose. The relationships among these dramatic categories are viewed as changing with the development of more advanced forms of human functioning, and a major task for developmental psychology set out

as that of revealing and then promoting factors conducive to development, and removing those conditions which are found to inhibit or militate against development.

The second session of the conference was concerned with 'Human Action in Varied Large Scale Contexts', and began with a presentation by *Bernard Kaplan* on culture and personality from a genetic-dramatistic perspective. Urging that ethnocentric value distinctions are ingredient to any descriptive, historical developmentalism that aims to lay out the 'facts' of ontogenesis in a culture, he showed how a cultural relativism which rejects a transcendent definition of development fares no better, for then even each individual or subculture defines its own standards.

The next presentation, by *Seymour Wapner*, *Robert Ciottone*, *Gail Hornstein*, *Ogretta McNeil*, and *Angel Pacheco* dealt with phenomena of 'critical transitions' in the person-environment system throughout life. With the aim of understanding the structural and dynamic system properties through developmental comparisons (in the Wernerian sense of the term), they analyzed developmental changes before and after transitions such as that from home to nursery, entering college, migration to the United States from Puerto Rico, and retirement.

A third session, entitled 'Part Processes in a Holistic Context', had two parts, the first on 'Concept Formation and Symbolization', the second on 'Perception'. In the first part, *Margery Franklin* discussed how language is used in constructing imaginary situations in play, and provided an illuminating discussion of the requisite types of activities for a play episode to occur (and what is currently known about their ontogenesis, from her own and others' research): (1) the establishment, specification, and maintenance of the sphere of play; (2) the establishment of identities for play entities – objects, persons, places; and (3) the creation and organization of events and sequences of play episodes.

Roger Bibace and *Mary Walsh* then discussed their research on the development of conceptions of illness and the different types of explanations individuals give for colds and heart attacks as a function of their age. Their goal was to highlight the different aims of their roles as researchers (exemplified in that enterprise) and their roles as clinicians and teachers of family medicine practitioners and to suggest ways of reconciling them.

Jonas Langer presented research findings on the relations between logic and symbolization from the ages of 6 to 18 months, regarding the process and structural organization of the development of representational cognition. His data indicate that the emergence of elementary logico-math-

emational operations and physical functions is not dependent upon the prior emergence of symbolic activity, as others have suggested.

Leonard Cirillo and *Bernard Kaplan* then outlined and illustrated their approach to the symbolic device of figurative action with a diversity of materials aimed at illustrating the revolutionary powers of symbolic actions (which express multivocality of meaning) to provide perspective by incongruity. Unlike much current work on metaphor which is directed only to the analysis of individual words in alien sentential/situational contexts, they discuss nonverbal as well as verbal figurative actions in scenes as diverse as therapy, ritual, hypnosis, politics, and the definition of psychology itself. Further, they argue for the radical position that no characterizations of a situation are 'literal'.

In the part of that session on 'Perception', *Robert Pollack* presented data indicating the utility of maintaining Werner's distinction between process and achievement for age-difference studies in adulthood. Apparent regression in problem solving performances by the aged in embedded figures tasks was not due to regressions in conceptual abilities, but to low-level problems in visual system operations. *Ricardo Morant* then outlined the anticipation in Werner's work of many contemporary studies in perception, and presented results from his experiments dealing with the interaction of apparent body posture and perceptual aftereffects from prism adaptation and labyrinthian stimulation. *Sybil Barten* presented theory and research directed to the problem of aesthetic experience, of how objects may be viewed as having their own physiognomy, or expressiveness. She discussed Werner's early work on the psychology of aesthetic enjoyment, and the roots of lyric poetry in magic, song, and dance, and its influence on her current research on modes of object description by artists versus scientists under varying experiential conditions.

George Rand began the fourth session on 'The Demands of Praxis on Theory' by describing his applications of comparative-developmental theory to designing and evaluating policies in practical affairs, for such settings as architecture and urban planning. Of particular interest were his process analyses of the dialectic between the romantic and the rational in project planning and design. *Edith Kaplan* discussed her own and others' neuropsychological studies indicating that research attentive to Werner's observations on process versus achievement is more accurate at distinguishing a patient's abilities and deficits than are predominant statistical methods.

After each session, discussants were prepared to interrogate individual speakers and raise general questions for session members. The discussants

were *Marc Bornstein, William Damon, Rachel Falmagne, Howard Gardner, Roy Pea, Ina Uzgiris, Sheldon White, and Peter Wolff*. Space precludes an accounting of the resulting dialogue, but the major themes which predominated in the discussions will be briefly summarized.

The relation between Werner's work and today's psychology was particularly controversial. Although many of Werner's contributions have been overtly acknowledged, debate centered on whether Werner's research and ideology has a guiding role to play in future developmental and psychological research, or whether it is important primarily for historical reasons. Central to this debate was a point elaborated by *Kaplan*: that from Werner's perspective, *all* psychology is developmental psychology; it is a way of conceptualizing the field of study, and developmental considerations must be at the core of any domain of psychological inquiry. It was observed by conference participants that Werner's stress on *process* is apparent in cognitive science, developmental, and neuropsychological research. Other ways in which Werner's unique developmental perspective prefigured many of the dominant themes of psychology today are: (1) his *holistic orientation*, which maintained that the meaning of an activity is context-dependent, and that an understanding of behavior and development requires such an orientation (only in the last decade or two has context played a central role in psychological studies); (2) the centrality of *symbolic processes*, whether manifested in art, language, magic, or ritual, for an understanding of human functioning; (3) the emphasis on the *coherency* of children's thinking in terms of its structured totality (rather than its 'illogicality'); (4) the stress, more common in the cross-cultural cognitive and 'ecologically valid' psychological studies today, that the tasks which are used to assess mental functioning must have *significance* in the system of activities in which an individual typically participates, and (5) the suggestion that a central aspect of mental development involves 'ordering functions' which give form and direction to the lower activities – today's 'metacognition'.

Those who contended that the Wernerian perspective still holds great promise underscored several of its programmatic features, yet to be fulfilled: (1) the need to articulate the range and interrelationship of methods for a developmental psychology which is capable of providing an understanding of the person-environment system as a dynamic, functioning *whole*, not as a collection of labelled and isolated parts; (2) systematic programs of research, utilizing such methods, which reveal the *workings* of the processes of developmental change for a diversity of content domains,

which would support (3) *intervention* programs aimed to maximize developmental progress to specified developmental goals.

Another point of contention concerned the relation between the goals of the natural sciences and the human sciences. Those with Wernerian training tended to stress a fundamental distinction between the two, with the goal of human science research being one of 'understanding' (e.g. *N.R. Hanson, S. Toulmin*) rather than prediction and control, which are postulated as the goals of hypothetico-deductive models of the social sciences. The status of 'explanation' in the two orientations is a critical issue that remains to be addressed by advocates of the distinction. Further, the manner in which principled decisions can be made from such a holistic developmental perspective as to what specifically one *will* study, and what aspects of functioning will *not* be considered in a particular case, remains to be specified. Certainly for clinical practice, boundaries would need to be drawn. So the critical question remains: where between group means and individual life biographies is the research province of neo-Wernerian perspectives?