Book reviews


It is usual to praise a book by saying that it will energize research. So this book will, in no uncertain fashion. But it will do so if and only if researchers slow down for a while, instead of rushing into their experiments. If one thinks for a moment about research on child language, or numeracy, or theory of mind, those got off the ground when people identified small sets of principles along with firm distinctions. Research on pictures, and how picture production changes, had to go ahead without a principled theory of pictures. This unusually clear book offers a set of principles; and, since it is about pictures, it is easy for the author literally to illustrate some rather abstract ideas. I stopped counting the number of times that I had to backtrack on what had seemed to me to be obvious assumptions to make about how a picture worked. It is always chastening to find out that common sense and sloppy viewing habits had got in the way of seeing what is in front of one’s eyes. I’ll just give one example.

Paul Klee’s drawings grab one’s attention, but they are so sparse and childish looking that they often get denounced as no better than graffiti. Willats takes one thick-brush drawing of some half a dozen lines, Klee’s 1937 Acb, aber ab, and isolates a principal line. He then takes the reader for a walk along the line, pointing out that that line smoothly changes its function no less than five times as it progresses, to denote edge, contour, tonal area, ridge and furrow. Those functions map onto changes in what the line refers to: bow tie, cheek, eyebrow, nose, upper lip. That plurifunctional one-to-one mapping between denotation and reference without any line breaks is shown to be a meticulous violation of two rules on which an adult drawing is normally based. The effect on the reader-viewer is like being shown by a linguist how a striking line of poetry packs its imagery down. Willats shows how that illustration summarizes the meticulous distinctions in the computational approach to vision that he had laid out earlier. The effect is to reinforce the message that it is simply not safe to do research on pictures unless one (a) bears in mind a crucial set of principles and distinctions, (b) looks at pictures very hard indeed, and then brings the two into a disciplined relation. It is a rare book that takes great care to extend one’s thinking and one’s vision, separately and together.

The argument is that ideas on why pictures change cannot be tested in the absence of a clear account of how they change. But this is no dry descriptive treatise, for the argument that runs throughout is that different ways of picturing serve different functions. Yet a functional level of explanation is indeed an answer to one of the why-questions in the evolutionary approach to behaviour. So Willats’ work does indeed answer one of the crucial questions about why pictures change. Pictures change to serve different functions.

The early chapters are devoted to projection systems, such as perspective, and denotation systems, such as silhouettes. Projection systems tell the artist where things go on the page, denotation systems offer a choice of marks to go in those places. The next section then explains why the two sorts of system generate effects that cluster: the clusterings trigger particular perceptual predispositions. The question of why those predispositions should be triggered is a functional question. A road sign, the London Underground map, an engineering drawing, a self-portrait, a landscape, all serve different functions which explain the choices available to picture producers. Maybe, when stated so baldly, that seems obvious. The implications are what count. Some implications are not at all available to common sense. Nor had they been taken on board in mainstream developmental research, as Willats shows in a later stretch of the book. There are so many empirically testable ideas to be generated from the approach that it is throughout a pleasure to read.

NORMAN H. FREEMAN (Department of Psychology, University of Bristol)
leads to two problems about internalization in two sections. One deals with the mind as internalized social interaction. It covers individualization as role (Zilma Olivera), a computer-based operationalization of social interaction (Jeanette Lawrence and Venessa Heinze), Cox’s discussion of the socially negotiated basis of mental categories in mathematics instruction (a paradigm case of necessary knowledge, surely) and Winegar’s analysis of the continuity problem, or how the social distribution of knowledge is compatible with its individualization. Jonathan Tudge is an excellent discussant, setting out two problems for sociogenesis. One concerns objectivity. There are ‘different’ positions about internalization (p. 125). How can any one of these be the ‘right’ one, and which one is it? The other problem concerns autonomy. If all cognition is distributed socioculturally, how is it possible for me to want you to think of ‘these’ thoughts as ‘my thoughts’, indeed to have ‘my thoughts’ at all (p. 129)? The other section deals with the mind as internalized symbolic action. It deals with cultural semiotics (Marie Varelas and Joe Becker), co-construction in the ‘theory of mind’ (Michael Boyes and colleagues), identity and gender formation (Ageliki Nicolopoulou) as well as Lightfoot’s discussion of the interpretive basis of the epistemic agent. In his discussant’s commentary, Mark Tappan shows that it is hard to dispel miracles. The social acquisition of understanding is not a sociogenetic explanation of developmental advance without recourse to internalization (p. 225). Jaan Valsiner offers a final commentary in which sociogenesis is—or ought to be—non-reductionist, chemistry rather than alchemy, in which due worth is given to the unity of construction by individuals in cultures. This means that that ‘the starting-point of any meaning-making action is the subjective, ego-centred core of the person (p.243). In short, internalization has no fear of redundancy in sociogenesis.

Let’s away with miracles by taking some cues from Piaget’s (1995a) Sociological studies (by-passed in toto in this collection). We can interpret both sociogenesis and psychogenesis through a developmental epistemology. Here’s five easy pieces. A is for autonomy in Newton’s acknowledgement ‘I achieved so much because I stood on the shoulders of giants’. Autonomy is the rethinking of collective notions (Piaget, 1995a, p.138), not on your own but rather ‘according to’ your own account (Piaget, 1995b, p.330). E is for entailment which is a logically necessary relationship that ‘could not be otherwise’. The Pythagorean theorem is either an ideology or a historical contingency (Piaget, 1995a, pp. 25, 243). I is for intersubjectivity based on the intersubstitutivity of identity of thought accessed by different minds in heterogeneous cultures and manifest as agreement between minds (Piaget, 1995a, pp. 94, 148). O is for objectivity in that all knowledge bears on truth, unlike an ideology or practice which can be wrong, intellectually and not just morally (Piaget, 1995a, pp. 80, 184). U is for universality which in this context means neither universal assent, nor cultural universals, still less the universal transfer of knowledge (Piaget, 1995a, p.178). But this is another story.

LESLIE SMITH (Department of Educational Research, Lancaster University)


This book reports David Lancy’s long and diligent effort to describe the development and enculturation of Kpelle children, an effort begun when he was a member of a research team working in the West African nation of Liberia (Gay & Cole, 1967; Cole et al., 1971; Scribner & Cole, 1981). The central argument: to understand what, as well as how, a child develops—among the Kpelle or any society—it is necessary to identify and describe the cultural routines created for the care and enculturation of the young. What children are to learn and know are embedded in these everyday routines and the way they are organized. To explore and elaborate these ideas, Lancy presents a variety of data collected using mixed methods (ethnography, participant observation, household census, surveys, experiments, ethno-semantic procedures, etc.). Focusing on what a ‘typical [Kpelle] child needed in order to succeed as an adult . . . ‘ (p.2), two kinds of routines are explored and illustrated: adult-guided activities (apprenticeship and bush school) and playforms (make-believe, structured games, songs, and stories).

Adult-guided and playform routines take place in the open spaces of villages and farms, so that children
and adults are nearly always in eyesight, and often in joint activity. These open spaces of play and work are the ‘mother-ground’ of the book’s title, an English translation of a Kpelle phrase that ‘conveys the notion that when children conduct their play in open, public spaces, it is as if they are being looked after by their mothers because everyone keeps an eye on them . . . ’ (p. 9). The weaving together of adult and child routines in a common space permits children to observe and incorporate into their play what they must acquire to be successful adults in Kpelle society. While ‘the transition from play work to real work is nearly seamless . . . some adult roles are just too complex to be acquired solely’ (p. 89) through make-believe play on the mother-ground. For roles, such as blacksmithing, a more formal apprenticeship system is used. The combination of make-believe play and formal apprenticeship works for what it was evolved to produce: young adults prepared to assume roles in village and farm life.

The book closes with a discussion of future prospects for traditional societies and socialization. In the author’s view, developed nations unwisely press developing countries to adopt universal primary education despite evidence that formal schooling has not paid off in transformed economies. In some cases, these and other international policies have produced wasteful and exploitative central governments that place traditional subsistence economies at risk. Moreover, children from traditional societies who attend Western style schools have less opportunity to learn the lessons of the mother-ground, putting at risk the enculturation of adult skills and practices on which more dependable, resilient village economies depend. As the result of this and other international policies as well as unchecked population growth, in the author’s view, traditional people face a difficult future. Citing the example of Kpelle society, he argues there are recent illustrations which suggest, contrary to prevailing beliefs in developed nations, that village-based subsistence economies can be indefinitely sustained. Whether village subsistence economies and the traditional enculturation of the mother-ground survive global trends remains uncertain. But in raising this question the author comes back to his central argument that there is a ‘powerful relationship between the kinds of experiences a society provides its children and the kinds of social, intellectual, and technical competencies mastered by adults’ (p. 200). Whether traditional or a brave new set of competencies are taught to children, societies will always need a mother-ground of some design. Wise developmentalists will always take this into account.

RONALD GALLIMORE (University of California)


This interesting and worthwhile second edition presents, in the form of eight chapters, illustrations of a central theme which runs throughout the book. The argument advanced in this book is that experimenta-
tion investigating the cognitive development of children, in a whole series of domains, does not account for the possibility that the conversational worlds of children and adults may not coincide. Siegal argues that this lack of sensitivity to children’s understandings of the purposes and rules of conversation can lead experimenter to undervalue the extent of children’s knowledge and understanding. This, in turn, has unfortunate consequences for educational (and other) practices which are based on this research. Of course, this is not a particularly new position to hold in developmental psychology, but this book does explore the theme in a clear and reasonably comprehensive fashion.

For the most part, the chapters are similarly structured. For example, Chapter 4, ‘Representing objects and viewpoints’ begins with an outline of the (usually Piagetian) seminal work, reports experimental work which has explored and developed the Piagetian position, and concludes by reassessing the topic in the light of more recent work characterized by sensitivity to the conversational and communicative character-
istics of the experimental contexts which have provided the data. Both the commonality of structure and the detail of the experimental work described are valuable aspects of this book. The structure assists the
It is set in New York where Charlie's father lives. We can see that Charlie was really missing his dad, their relationships are pretty warm. The title of the text excites many associations due to an abstract meaning in our mind of it. But as we see later a such name of story has ironical notes. The point of view in the story is first person. The relationships between the father and the son are in the center of whole story. In spite of anxious mood of Charlie before the meeting: “He was a stranger to me.” It all has desappeared by the very meeting: “But as soon as I saw him I felt he was my father.” This sentence is so powerful because of its use of the word “father” so we realize all violence and importance of genetic connection between relatives. As an alternative, I develop John Willats’s analytical method and compare it to Perini’s through engaging three of her examples—a chemical diagram, a graph and an electron micrograph. Ultimately, a space remains open for a mixed system where Willats’s account provides pictorial analysis and the Goodman–Perini approach parses visual languages.