Abstract  We can study dead forms from a distance, seeking to understand the pattern of past events that caused them to come into existence. We can, however, enter into a relationship with living forms and, in making ourselves open to their movements, find ourselves spontaneously responding to them, and in so doing, we can gain a sense of their character. In other words, from within our dialogically structured involvements with other living things, a kind of relationally responsive understanding, quite different from the referential-representational kind of understanding familiar to us in cognitive psychology, becomes directly available to us. Thus, rather than seeking to explain a child’s present activities in terms of their causes in the past, from the standpoint of an external observer, we can turn to a quite different aim: that of perceiving in a present behavior the possibilities and opportunities it offers for further developments. Orientation toward this aim is what I think is so special about both Vygotsky’s and Goethe’s historical methods of inquiry into the development of living forms.

Key Words  development, dialogicality, relational-responsive, responsiveness, understanding

John Shotter  University of New Hampshire, USA

Seeing Historically: Goethe and Vygotsky’s ‘Enabling Theory-Method’

By shifting the difficulty of our requirements, exposing the methods by which the task is mastered, and by prolonging our experiment over a number of consecutive series, we find ourselves capable of tracing in laboratory conditions the process of development in all its basic features and, hence, of arriving at an analysis of the factors that take part in it. (Vygotsky & Luria, in van der Veer & Valsiner, 1994, p. 160)

In the first two parts of my Contributions to Optics I sought to set up a series of contiguous experiments derived from one another in this way. Studied thoroughly and understood as a whole, these experiments could even be thought of as representing a single experiment, a single piece of experimental evidence explored in its most manifold variations. Such a piece of empirical evidence, composed of many others, is clearly of a higher sort. It
shows the general formula, so to speak, that overarches an array of individual arithmetic sums. (Goethe, quoted in Amrine, 1998, p. 38)

The whole of *Capital* is written according to the following method: Marx analyzes a single living ‘cell’ of capitalist society—for example, the nature of value. Within this cell he discovers the structure of the entire system and all of its economic institutions. He says that to a layman this analysis may seem a murky tangle of tiny details. Indeed, there may be tiny details, but they are exactly those which are essential to [the] ‘micro-anatomy’ [of the cell]. (quoted by Cole and Scribner, in Introduction to Vygotsky, 1978, p. 8)

The archetypal plant shall be the most marvelous creature in the world, and nature shall envy me for it. With this model and the key to it one can invent plants *ad infinitum* that must be consistent, i.e., that could exist even if they do not in fact, and are just picturesque or fanciful shadows, but have instead an inner truth and necessity. (Goethe, quoted in Amrine, 1998, pp. 39–40)

### Responsivity: Understanding Living Wholes

Central in what follows will be a focus on the *responsivity* of growing and living forms, both to each other and to the othernesses in their surroundings, and on *their* own particular and unique ways of coming-into-Being. Each requires understanding in its own way. While we can come to an understanding of a dead form in terms of objective, explanatory theories representing the sequence of events supposed to have caused it, a quite different form of engaged, responsive understanding becomes available to us with a living form. It can call out spontaneous reactions from us in a way that is quite impossible for a dead form. It is this that makes these two kinds of understanding so very different from each other. While we can study already completed, dead forms at a distance, seeking to understand the pattern of past events that caused them to come into existence, we can enter into a relationship with a living form and, in making ourselves open to its movements, find ourselves spontaneously responding to it. In other words, instead of seeking to explain a present activity in terms of the past, we can understand it in terms of its meaning for us, that is, in terms of our spontaneous responses to it. It is only from within our involvements with other living things that this kind of meaningful, responsive understanding becomes available to us (Shotter, 1993). This is what I think is so special about both Vygotsky’s and Goethe’s methods of inquiry into the development of living forms.

While dead assemblages can be constructed piece by piece from objective parts—that is, from parts that retain their character irrespective of whether they are a part of the assemblage or not—living wholes cannot. On the contrary, they grow. In the course of exchanges with
their surroundings, they transform themselves, internally, from simple individuals into richly structured ones. In this growth, their ‘parts’ are in a constant state of change; indeed, at any one moment, their ‘parts’ owe their very existence not only to their relations to each other, but also to their relations to the ‘parts’ of the whole at some earlier point in time. While existing in space, they are qualitatively transforming each other through time, thus the history of their structural transformations is of more consequence than the logic of their momentary structure. There is thus a distinctive ‘inner dynamic’ to living wholes not manifested in dead, mechanical assemblages. As such, they and their ‘parts’ are always ‘on the way’ to becoming other than they already are. This is why their special, living nature cannot be captured in a timeless, ‘everything-present-together’, spatial structure. Their special nature is known to us only in the distinctive ways in which they unfold in time; they thus require a special kind of understanding which takes their temporal ‘movement’ into account, a historical understanding.

In Chapter 5 of *Mind in Society*, Vygotsky (1978) exhibits just such an understanding of living forms. He remarks:

> To study something historically means to study it in the process of change. ... To encompass in research the process of a given thing’s development in all its phases and changes—from birth to death—means to discover its nature, its essence, for ‘it is only in movement that a body shows what it is’. The historical study of behavior is not an auxiliary aspect of theoretical study, but rather forms its very base. As P.P. Blonsky has stated, ‘Behavior can be understood only as the history of behavior.’ (p. 65)

Here, in talking of trying to encompass in the research process itself a given thing’s development in all its phases and changes, Vygotsky seems to be saying something very important—and I think he is. He is speaking of a process of inquiry which, I think, is aimed at achieving the kind of historical understanding I mentioned above—a process of inquiry which, if we were properly to understand its nature, would change not just all ways of inquiring into processes of child development, but the whole way in which we understand human phenomena in all the social and behavioral sciences.

But is that what he is saying here? Van der Veer and Valsiner (1991) speak of Vygotsky as having a ‘cultural history theory’, and go on to suggest that to understand any complex human phenomenon we must ‘study its history’ (p. 189). They then go on to link Vygotsky’s concerns with those of Durkheim, saying that ‘this view ... was quite common around the turn of the [20th] century’ (p. 189). But, as is well known, Durkheim’s (1915) aim was ‘to study the most primitive and simple religion which is actually known, to make an analysis of it, and to
attempt an explanation of it’ (p. 1). To do this, as he said, he felt it was ‘necessary to commence by going back to its most primitive form, ... and then to show how it developed and became complicated little by little, and how it became that which it is at the moment in question’ (p. 3). To me, this form of theoretical explanation does not seem to square at all with the aims of what Vygotsky variously called his ‘enabling theory-method’, his ‘experimental-developmental’, or ‘experimental-genetic’ method. Van der Veer and Valsiner fail to acknowledge his lack of concern with Newtonian notions of the *experimentum crucis* for testing theories under controlled conditions. They also fail to acknowledge his positive concern not only with what he calls ‘the functional method of double stimulation’ (Vygotsky, 1978, p. 74), in which experimental conditions are open to variation by children themselves, but also with his reasons for conducting a series of interlinked experiments in a given sphere of study (see epigraph quote).

Why, if he is merely seeking theoretical explanations in terms of causal sequences, does he say that his method ‘may be called experimental-developmental in the sense that it *artificially* provokes or creates a process of psychological development’ (p. 61, my emphasis)? Rather than being conducted to test hypotheses, his method is oriented toward, he says, ‘evolving a historical perspective in psychological experiments. It is here that the past and present are fused *and the present is seen in the light of history*’ (p. 64, my emphasis). To see the present in the light of history seems to me to be a goal quite different from that of providing historically structured, theoretical explanations of developmental phenomena. Indeed, Vygotsky himself says that this is not at all what he seeks: ‘The concept of a historically based psychology is misunderstood by most researchers who study child development. For them, to study something historically means, by definition, to study some past event’ (p. 64). Rather than appealing to certain events, now over and past, in order to *explain* something in the present, Vygotsky seems to have had something else in mind, something very different from a mere theoretical explanation. It is this that I want to explore below.

In the process, many more crucial issues will be hinted at than can be explored in detail; and certain tensions in Vygotsky’s own thought will become apparent. However, I shall focus on one main theme: that Vygotsky’s aim in his enabling theory-method is essentially perceptual. Rather than a way of thinking historically, a cognitive-theoretical aim, he sought a historically informed way of directly seeing human behavior developmentally. He wanted his enabling theory-method to render him capable of *observing* behaviors occurring now in terms of a
historically informed sensibility. As a result of conducting an appropriate series of experiments, he wants their results to ‘instruct’ him in how to see in our higher psychological functions, as they unfold before our very eyes, the complexly orchestrated sequence of elementary processes from which in fact they are (or can be) composed. If one can see complex human process in this way, then there is no need of any further theory. The method is the theory. As Vygotsky (1978) put it: the method ‘is simultaneously prerequisite and product, the tool and the result of analysis’ (p. 65).

Vygotsky’s ‘Enabling Theory-Method’

Let me try to describe this whole process more explicitly to make clear what is meant here: an appropriate sequence of experiments not only enables us to see certain momentarily occurring facts, but also enables us to come to an understanding of them in terms of their relations to other relevant facts, relations both to earlier events and to other contemporary events in the child’s surroundings. It is this, the display of the relations of such events to each other in the series of connected experiments, which gives us the ‘theoretical’ understanding we need. Indeed, if we begin with ‘the study of rudimentary functions as our point of departure for evolving a historical perspective’ (Vygotsky, 1978, p. 64), we can begin to observe in a complex activity both its possible origins in certain simple reactions of an individual human being to another (or to their surroundings), and how these simple reactions can become elaborated, step-by-step, into a more complex form.

Vygotsky (1978, pp. 56–57) outlines just such a possible developmental process in his account of the emergence of ‘pointing’. An initial, spontaneously occurring response toward an object in its surroundings by a child, for example its failed reaching to grasp an object, can be transformed by the responses of adults to it, for example by them naming the object or giving it to the child or both, into a gesture of pointing. Such a circumstance affords an opportunity to children to learn the ‘gestural’ function of such a movement, thus to gesture in such a way in order to mean something to an adult. To question whether this sequence in actual fact represents ‘the natural history of pointing’ or not is, I suggest, irrelevant. What Vygotsky’s account enables us to do here is to see (understand) in a ‘telescoped’ or ‘synoptic’ form a possible developmental sequence, and the part that we ourselves, as adults responsive to a child’s spontaneously responsive activities, might play in it. Thus we might, by responding to other spontaneous ‘gestures’ of a child toward an anticipated state of affairs, also transform them into
meaningful signs for deliberate use by them in communicating with us. An example here, one easily observed in all supermarkets while Saturday shopping, is of little children flapping their bent arms like wings as a sign of ‘please pick me up’. But it is not difficult to imagine other early gestural signs that one might jointly ‘create’ with one’s child from within one’s responsive involvements with them (see Lock, 1978, pp. 3–10, for a relevant discussion).

To be able to see our responsive involvements with our children in this way, a way that enables us to see how, jointly, in practice, we can create with them new gestures of a meaningful kind, is, I claim, precisely what Vygotsky (1978) means by saying that his aim is, to repeat, ‘to encompass in research the process of a given thing’s development in all its phases and changes’, ‘to develop a historical perspective in experiments’, ‘to study something historically’. To look at behavior in this historical fashion means being able to see not only the rudimentary, lower forms from which it is composed, but also the relations of possibility existing between them, thus to see further possible forms of development present in it yet to be realized.

In another illustration of the nature of his enabling theory-method, and the necessity for experimenters themselves to proceed developmentally in their application of it, Vygotsky discusses a study conducted by A.N. Leontiev designed to demonstrate the role of auxiliary stimuli (signs) in the development of voluntary attention and memory. I will not go into its details (but see Shotter, 1993, pp. 113–118); I mention it here solely to illustrate not only the way in which Vygotsky (1978) justifies his claim that his method is designed to provide ‘the opportunity to observe [the] natural history of the sign’ (p. 46), but also where he finds its point of departure, its rooting or grounding. He sets the scene for the study by commenting that:

Sign-using activity in children is neither simply invented nor passed down by adults; rather it arises from something that is originally not a sign operation and becomes one only after a series of qualitative transformations. Each of these transformations provides the conditions for the next stage and is itself conditioned by the previous one; thus, transformations are linked like stages of a single process, and are historical in nature. … Within a general process of development, two qualitatively different lines of development, differing in origin, can be distinguished: the elementary processes, which are biological in origin, on the one hand, and the higher psychological functions, of socio-cultural origin, on the other. The history of child behavior is born from the interweaving of these two lines. (p. 46)

In other words the starting-point for Vygotsky’s enabling theory-method is in a child’s spontaneous response to a circumstance; and
what this is transformed into is an activity that later the child can do deliberately. Qualitative changes are created within it, jointly, as a result of the responses of the others around the child to it.

But what Vygotsky says here about the step-by-step development of sign-using behavior in children can, I think, be very usefully applied to his own enabling theory-method, and the development of understanding it makes possible in those applying it.

Thus, from now on, besides seeing Vygotsky’s comments as applicable just to child development, I will interpret them as also of relevance to the developmental process involved in any of us coming to see child development historically by the use of his enabling theory-method. For, it is clear, by beginning with children’s primitive reactions, and by ranging his experiments over an appropriate sequence of different conditions, so that each experiment could be seen as linked to the next as a stage in a single developmental process, Vygotsky hoped to develop within himself an ability to see complex, higher forms of mental activity as composed of a whole intertwined set of spontaneously responsive elementary forms. The trick would be in arranging the sequence of experiments appropriately, so that each application of the method would give rise to a refinement of his inner, theoretical grasp of development, which in turn would suggest a next possible application of the method, and so on. Thus, as Cole and Scribner (1978) note, far from each of his experiments being conducted as single, crucial test of a theory, Vygotsky thought that ‘in a properly conceived experiment [or sequence or set of experiments] the investigator could create processes that “telescope the actual course of development of a given function”’ (p. 12). Just as those who have watched processes of cell-division filmed by use of lapsed-time techniques can imaginatively run through the process, back and forth, from its simple origins, through each division, up to a certain stage in the articulation of a complex form, so Vygotsky also hoped to ‘see’ developmental process—not as a fixed and static structure, but as something dynamic, growing and developing, something with its own distinctive style. Indeed, I think this is what he meant by saying his approach was concerned with ‘objectifying inner psychological processes’ (Vygotsky, 1978, p. 75, my emphasis).²

But: Is it legitimate to talk of the outcome of such a procedure as providing a theory? Can a spontaneously formed inner imaginative structure, within which we can, so to speak, ‘move around’, thus to bring different aspects of it into view at different times, be properly called a theory? Surely, the formulation on paper of a number of explicit laws or principles is what a theory is, isn’t it? Further: does the
mode of perception developed in applying Vygotsky’s theory-method properly qualify as a historically informed way of seeing? Doesn’t it have something of a contrived character to it? If actual facts of history have been ignored in its formation, what is the point of being able to observe phenomena in this ‘telescoped’ or ‘synoptic’ way? These are difficult questions to answer. Where might we turn for help? Recently, there has been a flurry of interest in Goethe’s scientific writings (Bortoft, 1996; Heller, 1952; Seamon & Zajonc, 1998; Sepper, 1988). This work is, I think, very relevant in clarifying both the unusual nature of, and the unusual aims of, Vygotsky’s enabling theory-method. Goethe’s way of science—his aims and his methods—are of a kind quite different from those familiar to us in our current mode of intellectual inquiry. Nonetheless, as we shall see, there are some remarkable parallels in Vygotsky’s and Goethe’s ways of science.

**Goethe: A Delicate Empiricism**

A central reason for attending to Goethe’s way of science is that he argued for the crucial need to distinguish living, growing and developing forms from dead ones, and for the use of special methods in observing living forms. For we need to arrive at what we might call a shaped and vectored sense of their ‘inner’ nature, that is, a sense not only of their current shape or form, of the forms from which they emerged, and of the next possible forms they might manifest—thus to grasp at each point in their development the opportunities possibly available to us to exert an influence on their development. The need for a special method thus arises because, more than merely an interconnected set of actualities, we must arrive at a holistic grasp of a structure of possibilities, that is, an ability to see events in terms of aspects not yet visible in them. Indeed, it is a concern with a set of necessary possibilities, if the form is in all its manifestations to retain its characteristic style—as Wittgenstein (1953) was to formulate it later—it is a concern with ‘logical grammar’.

Goethe describes the practicalities of his approach to this task thus:

If I look at the created object, inquire into its creation, and follow this process back as far as I can, I will find a series of steps. Since these are not actually seen together before me, I must visualize them in my memory so that they form a certain ideal whole. At first I will tend to think in terms of steps, yet nature leaves no gaps, and thus, in the end, I will have to see this progression of uninterrupted activity as a whole. I can do so by dissolving the particular without destroying the impression itself. (Goethe, quoted in Hoffman, 1998, p. 133)
This, then, is Goethe’s aim in his way of science: he wants to array his observations of a living, growing form in terms of an imaginative, dynamically experienced, inner spatial unity (an inner time-space image), and, in being able to move around and back and forth within it, to get a sense of the meaning of each of its momentary spatial configurations, according to their place or position in relation to all the others within the whole. He wants an inner, synoptic sense of a living thing’s life course, a sense of the inner space of its life possibilities.

He calls it the method of ‘exact sensorial imagination’. And, just as Vygotsky emphasizes beginning with something rudimentary, which occurs spontaneously, and which can be transformed by internal articulation into a higher form, so Goethe also begins in the same way: he begins with what he calls ‘an aperçu’, that is, ‘an apperception of what actually lies at the foundation of the appearances’. For he finds that ‘such an appearance is fruitful ad infinitum’ (Goethe, quoted in Brady, 1998, p. 98). And, as noted above, in beginning with something to which he is spontaneously responsive, something that strikes him, an impression, he explores the growth of the form, and articulates it into its details, from within the specific space of necessary possibilities established in that first impression.

Goethe begins, then, with his own responsiveness, with an impression or striking event. But his concern with the responsiveness of living forms to each other goes deeper. As Heller (1952) points out, although many different variations may be observable in a particular growing form, they can all be seen as emerging from the same distinctive source as a result of a gradual sequence of transformations or metamorphoses occurring as a consequence of the responsiveness of the form, at each moment of its growth, to local conditions in its surroundings. ‘This responsiveness, however,’ notes Heller (1952),

… is not a mere giving-in to external influences, it is rather like a creative conversation between within and without, a kind of dialectical education in which the form becomes in actuality what from the very beginning it had been potentially. (pp. 8–9)

It is by working within this realm of the responsiveness of living forms to events in their surroundings, and to each other, that leads us to see them in terms of a structure of possibilities, in terms of a dynamic sense of their responsively changing nature.

Goethe’s first excursions into this sphere were in the realm of plant forms. He observed that as plants grow and their stems lengthen and thicken, offshoots appear successively: cotyledons (seed leaves), stem leaves, sepals, petals, stamens, pistils, and so forth. And although the
stem leaves vary as one moves up the stem, each shape is obviously a transformation of the preceding one. Indeed, as he studied plant forms more and more closely and extensively, he became convinced that what he called ‘the original or primal plant’ (the Urpflanze), that is, the exemplary plant upon which all other plants are modeled, must exist. In an entry in his journal dated April 17, 1787, he wrote: ‘There certainly must be one. Otherwise how could I recognize that this or that form was a plant if all were not built on the same model?’ (Goethe, quoted in Brady, 1998, p. 95). Later, however, as a result of a conversation with Schiller in 1794, he came to realize that ‘the primal plant’ was a theoretical, not an observable, entity, that his method of observation led to a theory-laden way of seeing. His way of seeing, Goethe noted, was expressed well by a Dr Heinroth:

Indeed, he calls my method of procedure unusual, saying that my capacity for thinking is objectively active. By that he means that my thinking is never divorced from objects, that the elements of the objects and my observations of them interpenetrate, become fused in the process of thought; that my observation is itself a thinking, and my thinking is a way of observation. (Goethe, quoted in Brady, 1998, p. 97)

What is special, then, in the way in which Goethe interlinks his observations with his thinking is, by beginning with the spontaneous calls exerted on us by events in our surroundings, he shows us how we can go on to refine, elaborate and order our responses to such calls. We can develop the ability, so to speak, to ‘go out to meet’ phenomena with an embodied, anticipatory sureness of ‘what-is-to-come’, thus to relate ourselves to them appropriately in our practical affairs. To ignore our own, initial, living, responsive relations to living phenomena in our inquiries into their nature is to cut ourselves off from the very spontaneous calls and invitations they exert upon us in their way of coming-into-Being—and thus to deny ourselves the kind of knowledge we need if we are to answer their calls in ways that ‘they can understand’, that are appropriate to their nature.

Goethe was attentive to this lack of reciprocity, and how the (Newtonian) method of rational inquiry led to what he called ‘the gloom of the empirico-mechanico-dogmatic torture chamber’ (Goethe, quoted in Heller, 1952, p. 18). The approach he was objecting to is outlined by Kant (1970) in his Critique of Pure Reason as follows:

Reason, holding in one hand its principles, according to which alone concordant appearances can be admitted as equivalent to laws, and in the other hand the experiment which it has devised in conformity with these principles, must approach nature in order to be taught by it. It must not, however, do so in the character of a pupil who listens to everything that the teacher
chooses to say. But of an appointed judge who compels the witness to answer questions which he himself has formulated. (p. 20)

Aware that this formulation put the scientist in the position of ‘the task-master of nature, [who] collects experiences, hammers and screws them together and thus, by ‘insulating the experiment from man, . . . attempt[s] to get to know nature merely through artifices and instruments [Goethe]’ (Heller, 1952, p. 17), Goethe sought a more gentle approach. He sought, as he put it,

... a delicate empiricism which makes itself utterly identical with the object, thereby becoming true theory. . . . The ultimate goal would be to grasp that everything in the realm of fact is already theory. Let us not seek for something beyond the phenomena—they themselves are the theory. (Goethe, quoted in Brady, 1998, p. 98)³

Through the use of Goethe’s methods in a particular sphere of developmental activity, we can thus arrive at a living sense of ‘what leads to what’, thus to ‘know our way about’ inside the space of its possibilities. In other words, instead of the kind of referential-representational understanding of a phenomenon we are used to in our more scientific disciplines, which just accurately ‘picture’ a state of affairs without, so to speak, coming with any ‘strings attached’ as to what, conceptually, must precede or follow it, we arrive at a kind of understanding much closer in form to our everyday, spontaneous, common-sense understandings of the world around us. We can call it a relationally-responsive form of understanding. The methods work to produce ‘just that understanding which consists in “seeing connections”‘ (Wittgenstein, 1953, no. 122).

**Theory-Laden Seeing**

Rather than in terms of the explicit theories and externally imposed methods of natural science, the task of an enabling theory-method, then, is to come to an understanding of a living entity not in our terms, but in its own terms. Or, to put it another way: the task here is not to seek to be the master and controller of our surroundings, by imposing upon them prior plans of our own, but simply to seek to be a sure and confident participant in them, to feel ‘at home’ with them to such an extent that, at every moment, we know how to act in ways responsive to the ‘calls’ they exert upon us or the ‘invitations’ they offer us.

To be able to do this, we must understand our surroundings not just statically, as if constituted only of fixed and completed objects, but dynamically, as being in a developmental form of motion. And this is
what Goethe means by the use of the word ‘theory’ here. We must see the facts of our surroundings in terms of meanings, in ways which ‘point beyond’ them to other possibilities, to possible connections with events in the past, the present and the future. So used are we to thinking quantitatively, in terms of a world of self-contained, countable objects which exist only in an external relation to each other, that we think of a phenomenon as one essentially objective thing and the theory we have of it as another. Goethe’s notion of ‘theory’ as being to do with that aspect of our embodied responsive stance toward phenomena that ‘carries’ in it aspects of our responsive relations to our surroundings ‘carried over’ from previous involvements with them is utterly alien to us. We feel certain that when we talk of people’s theories, we are talking about ‘things’ represented in people’s papers or books—things with their own objective existence. But can this be so? Can a theory have such a self-contained existence and still be of use to us both in guiding our inquiries and in making sense of their outcomes?

Someone who has tried to cure us of such talk is Hanson (1958). His concern in his philosophical study of science is, he says, to ‘examine not how observation, facts, and data are built up into general systems of physical explanation, but how these systems are built into our observations, and our appreciation of facts and data’ (p. 3). Central to Hanson’s account is his claim, along with Wittgenstein (1953), that often we directly see something as something, for instance a cube as a cube; we do not see it first as a three-dimensional form with six equal sides which we then interpret as a cube. Indeed, even if a cube were made of glass, I could not see all its six sides at once, let alone whether they were all equal to each other or not. Only as I move around it, and join all my sequential experiences of it into a gap-less whole, can I come to a sense of it as a six-sided, three-dimensional whole. As Hanson (1958) remarks of the experiences going into one’s perception of a cube as a cube: ‘Ordinary accounts of the [appropriate] experiences . . . do not require visual grist to go into an intellectual mill: theories and interpretations are “there” in the seeing from the outset’ (p. 10)—‘seeing is a “theory-laden” undertaking’ (p. 19). Hanson goes further, however, to point out that we do not just see things as objects of a certain kind, but we see that ‘were certain things done to objects before our eyes, other things would result’ (pp. 20–21). For example:

Seeing a bird in the sky involves seeing that it will not suddenly do vertical snap rolls [i.e. a sudden flip over into inverted flight]. . . . We could be wrong. But to see a bird, even momentarily, is to see it in all these connections . . . every perception involves an aetiology and a prognosis. (p. 21)
To see in this factual way is already to see theoretically. It is to look around in one’s surroundings in a way organized or instructed by a structure of anticipated, necessary possibilities, thus to be able to look from one momentary event with a clear expectation of what next can possibly be related to it.

Vygotsky (1978), in talking of the ‘internalization of the visual field’ (p. 26), remarks that a special feature of human perception—‘for which there is no analogy in animal perception’—is that ‘I do not see the world simply in color and shape but also as a world with sense and meaning’ (p. 33). For instance, just as I see the person over there as neither one inch nor as five feet tall, but as someone in the distance, so also, to use an example from Vygotsky, ‘I do not merely see something round and black with two hands; I see a clock and I can distinguish one hand from the other’ (p. 33). In coming to see our surroundings in a way organized by a structure of anticipated, necessary possibilities shared with the others around us, what Vygotsky adds to Hanson and Goethe is an emphasis on the ‘instructive’ influence of other people’s words (and our own) upon our ways of perceiving and acting. While we initially respond spontaneously to events occurring around us, we ultimately come to respond in ways which go far beyond such immediate, impulsive responses. ‘With the help of the indicative function of words,’ says Vygotsky (1978), ‘the child begins to master his attention, creating new structural centers in the perceived situation’ (p. 35). The child, however, can with the help of speech do even more: he [sic] can create

… a time field that is just as perceptible and real to him as the visual one. The speaking child has the ability to direct his attention in a dynamic way. He can view changes in his immediate situation from the point of view of past activities, and can act in the present from the viewpoint of the future. (p. 36)

Thus what is internalized when a certain way of looking at a visual field is internalized is a deliberately organized way of seeing and acting constituted from a set of elementary, spontaneous forms ‘called’ out in an orchestrated sequence by a set of initially explicit verbal ‘instructions’.

And these remarks of Vygotsky could equally well be applied to us all, as well as to Vygotsky himself in organizing his own conduct of his own enabling theory-method. It is not just children who can be affected in this way, but we academics also. Indeed, just as much in the shaping of our attention as Vygotsky’s, it is the constitutive, formative or instructive function of our speech that is crucial. Our words, in calling us to attend in certain responsive ways to events in our
surroundings, can call us into responding to a situation in a certain way, a way which we can from then on, so to speak, continue to ‘carry in’ our embodied ways of responding to that situation again and again—but further, our words can also call us into ‘carrying over’ that same way of responding into other similar such situations. It is thus in this sense that all that is fact for us is already theory. It is theory for us not in the sense of being an explicit, orderly, scientific theory, but in the sense of the unsystematic, ‘spontaneous concepts’, as Vygotsky (1986, pp. 146–149) calls them, which we form in the ‘unlessoned’ activities of our everyday lives. And it is in terms of such spontaneous concepts, or ‘complexes’, as Vygotsky (1986) calls them, that we respond to, and make immediate sense of, things in our everyday, practical lives.

In *Thought and Language*, Vygotsky (1986) discusses ‘the ascent to concept formation’ (p. 110), and clearly privileges conceptual thought over thinking in complexes: ‘All higher functions’, he claims, ‘have in common awareness, abstraction, and control’ (p. 179). Whereas, in the early stages of development, ‘the child tends to merge the most diverse elements into one unarticulated image on the strength of some chance impression’ (p. 110). Thus, when thinking in complexes,

... individual objects are united in a child’s mind not only by his subjective impressions but also by *bonds actually existing between these objects*. ... Since a complex is not formed on the plane of abstract logical thinking, the bonds that create it, as well as the bonds it helps to create, lack logical unity; they may be of many different kinds. (pp. 112–113)

Vygotsky tends to reinforce his depreciation of complex thinking by linking it to the ‘trait of primitive thought’ called *participation* by Lévy-Bruhl—a term applied

... to the relation of partial identity or close interdependence established by primitive thought between two objects or phenomena that actually have neither contiguity nor any other recognizable connection. ... Primitive people think in complexes, and consequently the word in their language does not function as a carrier of the concept, but rather as a *family name* for a group of concrete objects belonging together, not logically, but factually. (pp. 128–129, my emphasis)

**Conclusions: New Beginnings in ‘First-Time Events’ That Make a Difference**

It is at this point that we run into a contradiction. And as a result, we can easily find ourselves diverted from our concern with the nature of
Vygotsky’s enabling theory-method. For while Goethe (and Wittgenstein too) sees participatory thinking as precisely the kind of thinking we must from now on seek—if we are to move beyond the limitations of abstract, theoretical schemes of thought in relating ourselves to the living forms around us—Vygotsky (1978) seems to disparage such thinking in complexes as primitive. He is not unaware of the fact that we still make use of such thinking in our daily lives: ‘The adult constantly shifts from conceptual to concrete, complex thinking. The transitional, pseudoconceptual form of thought is not confined to the child’s thinking; we too resort to it very often in our daily lives’ (p. 134). Nor is he unaware that: ‘The principal function of complexes is to establish bonds and relations. Complex thinking begins the unification of scattered impressions; by organizing discrete elements into groups, it creates a basis for later generalizations’ (p. 135). But, rather than seeing a complex as based in a piece of empirical evidence that is ‘clearly of a higher sort’ (Goethe)—just because it is organized as a unity of scattered impressions—he sees it instead as ‘a definite historical stage in the development of language and thought’ (p. 129). For

\[ \text{... the advanced concept presupposes more than unification. To form such a concept it is also necessary to abstract, to single out elements, and to view the abstracted elements apart from the totality of concrete experience in which they are embedded. (p. 135)} \]

But, as we saw above, the need for a special method arises because we are dealing with living, not dead and mechanical, forms. And, to come to an understanding of living forms, we must encompass more than merely an interconnected set of elements abstracted from concrete experience; we must also see those elements in terms of a unified structure of possibilities unfolding in time: to see the being before one historically is to see it as a being of this rather than that kind, as having this rather than that style of life. Thus each particular life form we encounter presents us with the same task all over again. We need a sense not only of crucial past events shaping its present form, and thus a sense of events to which it might now be responsive, but also of the next possible forms it might manifest as a result. And it is this, as Goethe realized only too well, that is the strength of participatory thinking: for once one has identified oneself with, or internalized a synoptic sense of, all the tiny details of the responsive life of a particular living form, from birth to death, then one is in the position of being able oneself to respond, practically, to it, at whatever stage of development it happens to be.
This point is crucial, and has the most startling consequences for our understanding of Goethe and Vygotsky’s enabling theory-method. The classical experimental method is concerned with controlled conditions in the search for regularities, repetitions and stabilities, in terms of samenesses. On the other hand, Vygotsky’s enabling theory-method works in terms of particularities, in terms of unique, first-time, only once-occurring events—events which matter to a particular living form or being because, in calling out responses from it, they can produce changes in it. And it is only from the possibilities made available to us in our own spontaneous responses to each such form or being around us that we can develop the ability to ‘go out to meet’ it with an anticipatory sureness of ‘what-is-to-come’, of how it will respond to us. Indeed, as Vygotsky (1986) remarks: ‘The general law of development says that awareness and deliberate control appear only during an advanced stage in the development of a mental function, after it has been used and practiced unconsciously and spontaneously’ (p. 168).

Wittgenstein (1980), too, voices a similar claim: ‘The origin and primitive form of the language-game is a reaction; only from this can more complicated forms develop. Language—I want to say—is a refinement, “in the beginning was the deed”’ (p. 31). Where by the word primitive Wittgenstein (1981) says that he means that ‘this sort of behavior is pre-linguistic: that a language-game is based on it, that it is the prototype of a way of thinking and not the result of thought’ (no. 541). It is a prototype of a way of thinking because, when we spontaneously respond to the activities or expressions of another living being, our response is not wholly our own—it is a complex mixture of influences, and is shaped, at least partially, by their activities. If their actions matter to us, if we are changed in our being by them, we can come to an extent to embody their way of acting within us. As Goethe puts it: ‘every new object, well contemplated, opens up a new organ of perception in us’ (quoted in Amrine, 1998, p. 47).

Here, then, is a method which begins with first-time, unrepeatable events which matter to us, which make a difference to our lives, events which open up new ways of seeing and thinking to us, to do with the distinctive ways of being in the world of this, that or some other form of life—so that were we to see a cat bouncing around us, panting, and chasing after thrown objects, we would think it a most peculiar cat. We cannot see into the ‘inner lives’ of different living beings in any other way. So, although the first-time events of interest to us in this sphere are vague, only partially specified events which spontaneously ‘strike’ us or ‘move’ us, they nonetheless in all their vagueness have a unique
quality to them. And this initially vague but unique impression can be further articulated, internally, into a much more highly specified, dynamic inner sense of the particular form of life in question by the iterated use of Vygotsky’s enabling theory-method. As Vygotsky (1978) himself notes:

Obviously, the early sessions during which a reaction is formed are of crucial concern because only data from this period will reveal the reaction’s true origin and its links to other processes. Through an objective study of the entire history of the reaction, we can obtain an integrated explanation of both its internal and surface manifestations. Thus, we will want to study the reaction as it appears initially, as it takes shape, and after it is firmly formed, constantly keeping in mind the dynamic flow of the entire process of its development. (p. 69)

This concern with gaining a sense of the development of a unique and particular form of life returns us again, I think, to the point at which this article began.7

Notes

1. Hence the need to put the word ‘parts’ in scare quotes. While, perhaps, analytically separable, the ‘parts’ of a living whole cannot be substantially separated.

2. Although here is not the place to expand on these issues, Whorf’s (1956) comments on the tendency toward objectification in western thought should not go unheeded. Rather than talking in terms of sensuous or responsively sensed distinctions in our relations to our circumstances (as in Native American languages), Whorf notes our tendency, first, to spatialize time, and then to talk metaphorically of mental phenomena in terms of an imaginary, objectified, inner space patterned on our experience of space in the outer world. When Vygotsky talks of objectifying inner mental processes, it is also a matter of ‘imaginatively spatializing qualities and potentials that are quite nonspatial’ (Whorf, 1956, p. 145).

3. Now, with Bakhtin’s (1984) work also in the background to draw on, we might cast Goethe’s distinction in terms of a contrast between dialogical and monological modes of relation:

With a monologic approach (in its extreme pure form) another person remains wholly and merely an object of consciousness, and not another consciousness. . . . Monologue is finalized and deaf to the other’s response, does not expect it and does not acknowledge in it any decisive force. . . . The single adequate form for verbally expressing authentic human existence is the open-ended dialogue. Life by its very nature is dialogic. To live means to participate in dialogue: to ask questions, to heed, to respond, to agree, and so forth. In this dialogue a person participates wholly and throughout his whole life: with his eyes, lips, hands, soul, spirit, with his whole body and deeds. He invests his entire self in discourse, and this discourse enters into the dialogic fabric of human life, into the world symposium. (p. 293)
4. Geertz (1983), in his discussion of common sense as a cultural system, that is, ‘as a relatively organized body of considered thought’ (p. 75), takes it as the basic source from which we draw the points of departure for all our other, more institutionalized forms of knowledge. Thus, just as our sciences are built upon the foundations it provides, so are the explanatory theories of other people’s. Thus for the Zande people,

... it is as part of [the] tissue of common-sense assumptions, not of some primitive metaphysics, that the concept of witchcraft takes on its meaning and has its force. For all the talk about its flying about in the night like a firefly, witchcraft does not celebrate an unseen order, it certifies a seen one. (p. 79)

And Geertz goes on to outline the distinctive features of common sense as a considered body of cultural knowledge in terms of the following four properties: ‘practicalness’, ‘thinness’, ‘immethodicalness’ and ‘accessibleness’ (pp. 85-92). It is not relevant to explore the nature of common sense here any further except to remark that whereas in the past we saw its very lack of order as a reason for attempting to replace it by a scientifically ‘discovered’ body of knowledge, we can now see its ‘immethodical’ richness (and all its other Geertzian properties) as providing us with an inexhaustible supply of ‘continuously-updatable’ practical knowledge—as we shall see further in what follows.

5. Wittgenstein (1953), as a result of his investigations into the logical grammars of our use of words in our language, remarks: ‘And the result of this examination is: we see a complicated network of similarities overlapping and crosscrossing; sometime overall similarities, sometimes similarities in detail. I can think of no better expression to characterize these similarities than “family resemblances” ‘ (nos. 66-67).

6. The quotation here is from Goethe’s Faust, Part I (In the Study).

7. I must thank Barbara Rogoff for bringing the following quote from Vygotsky (1987) to my attention:

The fundamental aspiration of the whole of modern psychology... [is] the wish to reveal the eternal child. The task of psychology, however, is not the discovery of the eternal child. The task of psychology is the discovery of the historical child, of what Goethe called the transitory child. The stone that the builders have disdained must become the foundation stone. (p. 91)

References


Biography

JOHN SHOTTER is a Professor of Interpersonal Relations in the Department of Communication, University of New Hampshire. His long-term interest is in the social conditions conducive to people having a voice in the development of participatory democracies and civil societies. He is the author of *Images of Man in Psychological Research* (Methuen, 1975), *Human Action and Psychological Investigation* (with Alan Gauld, Routledge, 1977), *Social Accountability and Selfhood* (Blackwell, 1984), *Cultural Politics of Everyday Life: Social Constructionism, Rhetoric, and Knowing of the Third Kind* (Open University, 1993) and *Conversational Realities: The Construction of Life through Language* (Sage, 1993). ADDRESS: Prof. John Shotter, Department of Communication, Horton Social Science Center, University of New Hampshire, Durham, NH 03824-3586, USA. [email: jds@christa.unh.edu]