

**Zeitschrift:** Zeitschrift für pädagogische Historiographie  
**Herausgeber:** Pädagogische Hochschule Zürich  
**Band:** 15 (2009)  
**Heft:** 1

**Artikel:** Reinventing structuralism for the postmodern sensibility  
**Autor:** Mayer, Susan Jean  
**DOI:** <https://doi.org/10.5169/seals-901742>

### **Nutzungsbedingungen**

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

### **Conditions d'utilisation**

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

### **Terms of use**

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

**Download PDF:** 05.12.2025

**ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>**

- Piaget, Jean: Die Aktualität des Johann Amos Comenius (1957). In: Jean Piaget: Über Pädagogik. Weinheim 1999, S. 246–282
- Piaget, Jean: Development and learning. In: Richard E. Ripple/Verne N. Rockcastle (eds.): Piaget rediscovered: a report of the Conference on cognitive studies and curriculum development. Ithaca: Cornell University Press 1964, S. 7–20
- Piaget, Jean: Erziehung und Unterricht seit 1935 (1965). In: Jean Piaget: Theorien und Methoden der modernen Erziehung. Wien 1972, S. 13–137
- Piaget, Jean: Genetic epistemology. In: Columbia forum: a quarterly journal of fact and opinion 12(1969), S. 4–11
- Piaget, Jean: La psychologie. In: Jean Piaget: Tendances principales de la recherche dans les sciences sociales et humaines, première partie: Sciences sociales. Paris 1970, S. 274–339

- Piaget, Jean: Die Zukunft unseres Bildungssystems (1972). In: Jean Piaget: Das Recht auf Erziehung und die Zukunft unseres Bildungssystems. München 1975, S. 67–91
- Piaget, Jean/Bringuier, Jean-Claude: Jean Piaget. Ein Selbstporträt in Gesprächen (1977). Weinheim 2004
- Tenorth, Heinz-Elmar (Hrsg.): Klassiker der Pädagogik. München 2003
- Vidal, Fernando: Immanence, affectivité et démocratie dans Le jugement moral chez l'enfant. In: Bulletin de psychologie 51(1998), S. 585–597
- Walberg, Herbert/Rasher, Sue Pinzur/Mantel, Harvey: Eminence and citations in educational psychology. In: Educational Researcher 6(1977), pp. 12–14
- Xypas, Constantin (ed.): Education et valeurs – Approches plurielles. Paris 1996
- Xypas, Constantin: L'autre Piaget. Cheminement intellectuel d'un éducateur d'humanité. Paris 2001

## Reinventing Structuralism for the Postmodern Sensibility<sup>1</sup>

**(Red.) Der nachfolgende Beitrag rekonstruiert die Spannungen innerhalb des Strukturalismus aus dem Blickwinkel postmoderner Sozialwissenschaften. Im Zentrum stehen zunächst die drei vielleicht prominentesten humanwissenschaftlichen Strukturalisten – Lévi-Strauss, Piaget und Foucault – mit Fokus auf deren Beitrag für die Idee eines neudefinierten Strukturalismus. Mit Bezug auf die neostrukturalistische Literaturtheorie Manfred Franks wird dann versucht, im Rahmen der Sozialwissenschaften dem Desiderat einer grundsätzlichen neostrukturalistischen Integration von Kontext und Struktur nachzukommen. Im Hintergrund dieses Unterfangens steht die These, dass nur eine solche Verbindung den Boden eines normativen Anspruchs gegenüber der sozialen Welt bereiten kann.**

• Susan Jean Mayer

### Introduction

Structuralist social scientists and theorists have sought to conceptualize the implicit psychological and sociological systems that underlie human experience. In light of the insights represented by the work of Darwin, Marx and Freud it remains impossible to abandon such imaginings entirely. Yet human experience consistently eludes the conceptual ambitions of grand theorists, suggesting that a final mapping of its organizing dynamics may forever outpace human conceptual capacities (Rose 1996; Kvale 1992). Social and psychological systems

interpenetrate in a highly non-linear fashion, and even pointed and practical conceptualizations only achieve theoretical coherence by holding a wealth of confounding considerations at bay (Connell/Mayer 2008).

Contemporary social scientists must therefore disrupt inherited traditions that promote the over-theorizing of their inherently contingent and partial analyses, traditions that have led, for example, to today's troubled relationship between educational psychology and curricular theory (Lagemann 2000). Educational practitioners, unable to count on the findings of research that precludes the complicating features of their professional environments, have nonetheless found themselves saddled with programs and prescriptions based on that very research (Lather 1991). The resulting record suggests that social scientists – and not just learning theorists – must study a new humility in regards to the ways in which their work might inform broader institutional aims and methods.

For efforts to conceptualize reliable features of shared psychological and sociological realities remain essential to the workings of a secular democracy; they might even be thought to offer grounds for a sense of shared moral purpose in a postmodern age. As Foucault put it, «order is, at one and the same time, that which is given in things as their inner law, and also that which has no existence except in the grid created by a glance, an examination, a language» (Foucault 1970, p. xx). Structuralist analysis, then, offers means for envisioning social purposes and possibilities that could not be seen if not for the glance, the examination, and the language that seeks to uncover the systems underlying our present realities.

To begin, I consider the significant contributions that the thought of Lévi-Strauss, Piaget, and Foucault – the principal structuralists to engage the social sciences – have all made to the development

and elaboration of structuralist thought. In framing these contributions, I employ a grid of critical distinctions that historically have served to fracture the broader structuralist project within the social sciences. Positioning each scholar within this grid helps to demonstrate the ways in which each of the three provides necessary perspective on that historic project while also providing necessary conceptual resources for a reinvented neostructuralism.

On this basis, I call for a principled integration of context and structure in research designed to advance normative claims regarding the social world, arguing that postmodern scientific sensibilities demand that any structural analysis be located within an articulated contextual frame. Here I draw in part on Manfred Frank's philosophical treatise on a neostructuralist literary analysis (Frank 1989), in which Frank argues that structuralism must make two moves to maintain analytic relevance: 1) analyses must be framed as non-central; 2) analyses must be framed as permeable to the influences of alternative interpretive possibilities. No structure, then, can usefully be conceived in either primary or final terms.

Assuming anything can be known of the systems that organize human experience, scientists now appreciate that such knowledge will necessarily be gained in relation to specific circumstances, methods, and aims. Only by placing a structural analysis into relationship with a broader consideration of such contingencies, then, can one establish the significance of that analysis for the practical enactment of any human endeavor. Having proposed a principled pairing of structural and contextual analyses, particularly in research that advances normative claims regarding social practices, I close with an example of such a pairing from my own work.

### Background

Classic structuralist claims within the human sciences have sought grounds within biology, language, and universal cultural forms such as myth, kinship relations and cuisine (Lévi-Strauss 1966, 1967, 1969; Piaget 1968; Saussure 1959). Behind these efforts lay paired commitments to a set of stable determinants of human reality and to a human capacity to discern these organizing systems as expressed within the realms of human thought and action. Such commitments were intended to replace, on the one hand, superficial analyses based on fragmentary observational data and, on the other, what was perceived to be an overemphasis on the role of individual subjective consciousness in the construction of human reality (Dosse 1997; Merquior 1986).

Even during structuralism's ascent in the academy, however, several divergent, interpenetrating lines of thought were conspiring to undermine any sweeping claims regarding the social world. By the mid-twentieth century, consensus among physical

scientists regarding the conceptual contingency and ultimate indeterminacy of observational data had to some extent inspired heightened awareness of methodological parameters within all sciences (Kuhn 1962; Polanyi 1958). Naturally many were to find an adequate methodological sensitivity all the more problematic – some prohibitively so – within the enormously complex and unstable domains of social science (Rose 1996; Kvale 1992).

Pragmatic philosophers, attuned to the social (and broader ontological) implications of scientific thought and to the complex dimensions of all social phenomena, also advanced contingent visions of social worlds throughout this period (Dewey 1929; Rorty 1982, 1989). In response to outmoded, but intuitively attractive positivist perspectives, contemporary pragmatic and continental philosophy has stressed the necessity of recognizing that any particular framing of human meanings will embed contingencies at observational, linguistic and other socio-historical levels and so cannot be considered final or even primary in absolute terms (Peters/Wain 2003).

French philosophers – in particular Michel Foucault, who published his «archeology of the human sciences» in 1970 – further sought to expose historical discontinuities between the shifting conceptual matrices that have constructed Western understanding, challenging the notion that knowledge advances with time (Foucault 1970). Foucault termed an epoch of knowledge construction an «episteme,» a concept which subsumes Kuhn's related but more specific notion of «paradigm» within the physical sciences (Kuhn 1962). Foucault's emphasis on the contingent and arbitrary aspects of knowledge production systems, and therefore all human understanding, challenged classic structuralism's interest in universal organizing influences capable of revealing «man's» true nature.

In any event, an expanding body of feminist and post-colonial scholarship had been working to overturn «universal man» as a legitimate object of study over these same years (Beauvoir 1952; Bhabha 1994; Butler 1999; Fanon 1986; Lather 1991, 2007). The academy's historic neglect of the experience and realities of the disenfranchised has rebounded with a vengeance within critically oriented areas of the academy, nurturing an endemic distrust of any claim made about human experience writ large. The stubborn positivist tilt of North American social science, which has nurtured a compounding disdain for contextual complexities of any kind, only serves to exacerbate such distrust.

Profound and legitimate concerns regarding the relationship between any structural analysis and the reality it is intended to inform, then, unavoidably arise. Regrettably, the resulting uncertainty has tended to constrict psychological vision relative to the social world and to fracture sociological debate along ideological lines.

## Key Conceptual Distinctions within Structuralist Social Science

The stunning insights that resulted from the move to structural analysis within linguistics in the early twentieth century soon drew other social scientists into the structuralist fray. Lévi-Strauss, who had fled World War II Europe for the New York School for Social Research, came to believe that the linguistic analytics of fellow traveler Roman Jakobson could be adapted to anthropological analysis. Lévi-Strauss' prior field experiences in the Amazon jungle had already convinced him that all human beings think in the same fundamental manner and that cultural forms such as myth, cuisine, and kinship patterns must all therefore be organized according to a finite set of underlying logics (Dosse 1997; Gardner 1972).

Piaget had been working, at the same time, to chart a sequence of unfolding conceptual patterns through which local schoolchildren appeared to move as they developed a capacity for logical and mathematical reasoning (Mayer 2005). In so doing, Piaget had come to believe that all children must construct a capacity to reason logically over time in relation to both the material and social worlds.<sup>2</sup> Unlike the structural investigations of his colleagues in linguistics and anthropology, then, Piaget more narrowly focused on the underlying mathematical and logical forms that work to structure human thought and did not investigate, much less interrogate, the relationships between those forms and the various semiotic systems that come to express such forms within different cultures (Piaget 1970).

Structuralism's linguistic origins, however, pointed in both directions – toward biologically rooted propensities for humans to reason in particular ways and toward the contingent play of local semiotic systems. One key conceptual distinction within structuralist social science lies between the biologically oriented «palaeo-structuralisms,» represented most prominently by Radcliff-Brown of the Anglo anthropological tradition, and the predominantly French structuralisms that have focused on contextual semiotic analyses (Kurzweil 1980; Leach 1970; Merquior 1986). The Swiss-French Piaget drew primarily upon the Anglo tradition and its emphasis on biologically rooted impetuses; contemporary neo-Piagetian theorists follow suit.<sup>3</sup>

In contrast, Lévi-Strauss drew also on the semiotic emphases of the linguistic structuralists, attending to both of the realms framed by Saussure's distinction between the rules of a linguistic system and the content that a system expresses (Saussure 1959). As discussed below, Lévi-Strauss drew upon the assumptions of the Anglo anthropological tradition regarding the organizing influences of biologically rooted propensities (as well as environmental universals) within the social world in order to anchor his cultural portraits within a universal humanity. Within linguistic structuralism, these organizing in-

fluences were described by simple algebraic relationships. The use of mathematics and formal logic to represent basic psychological patterns characterizes all traditional structuralist thought.

Foucault, in contrast with both Piaget and Lévi-Strauss, concerned himself primarily with the representational capacities and constraints of temporally and spatially local semiotic systems, which he did not tie back to any fundamental psychological patterns or, certainly, to algebraic relationships (though, as his quote above suggests, Foucault assumed that meaningful links exist between cultural semiotic systems and an enduring material reality). Foucault's commitment in *The Order of Things* (1970) is to rendering the conceptual underpinnings of the knowledge construction systems of Western social science and the historically located circumstances of their development.

A first key theoretical distinction within structuralist social science, then, can be drawn between structure born of species-general biological and environmental realities and contingent culturally generated forms and meanings. A second key theoretical distinction lies between explicitly normative and deconstructive analyses. As noted above, Foucault's structuralist analysis of the development of the social sciences helped to rupture embedded Western assumptions regarding the natural forward flow of human understanding. As discussed below, Foucault's early work has also been seen by many as severing the social system from the field of human agency: one is shaped by entrenched semiotic systems over which one has no control. Clearly, such a reading provides no basis for normative social potential or direction.

Piaget and Lévi-Strauss, in contrast, both implicated a normative reality toward which modern society might orient itself. Lévi-Strauss located his sense of normative purpose within the social systems of traditional societies, which he felt to be more sensitively elaborated and symbolically rich than those of modern industrial societies. Though Lévi-Strauss saw all cultural systems as based in species-general impetuses (Lévi-Strauss 1963), he felt that traditional societies constructed more satisfying understandings from those beginnings. In Lévi-Strauss' view, modern disciplinary lenses eliminated the contextual nuance that deepens intellectual awareness, shapes apt material practices, and nurtures an existential sense of belonging and place (Lévi-Strauss 1966).

The contrast in this regard between Lévi-Strauss and Piaget provides an additional level of conceptual distinction here, for Piaget located *his* sense of normative purpose in the continued social development of a human propensity for logical and mathematical reasoning. In Piagetian thought, mathematical forms do also intimate of humanity's shared psychological roots; more crucially, though, they point toward an unfettered expansion of analytic possibilities. In stark opposition to Lévi-Strauss'

marking of the potential contributions of contextually elaborated insights or understandings, Piaget looked to an ever evolving articulation and elaboration of universal logical forms to drive humanity's moral evolution (Chapman 1986, 1988; Vidal 1994, 1998).

Structural social science can therefore be usefully considered in relation to the following grid of focal distinctions: 1) between species-general propensities and constraints and locally situated meanings, traditions, and material practices; 2) between normative and deconstructive analyses (and, further, according to the basis of proposed normative claims). This set of tensions is fundamental to any structuralist conception of the social world and therefore must be explicitly theorized within work that seeks to speak to social patterns and regularities.

### The Romantic Enthusiasms of Lévi-Strauss

Based upon its linguistic beginnings, structuralist analysis has foregrounded universal human propensities to categorize phenomena and to think in dyadic oppositions. As noted, insights into the ways in which such propensities can be seen to structure human language systems originally sparked Lévi-Strauss' enthusiasm regarding the role those same logics might play in organizing other kinds of social systems. While such basic intellectual inclinations may well find expression within all systems of human meaning, however, their relevance to various orders of analysis within the divergent domains of social science – from economics to psychoanalysis – will clearly vary.

Anthropology, Lévi-Strauss' disciplinary realm, emphasizes the construction of rich and holistic description of local cultural expressions which then can be placed into relationship with broader categories of human experience. This kind of close and deliberate study of a specific people located within a given biosphere and wider sociological context will naturally afford and promote considerations of situated development. To the extent that any culture studied appears to provide generously for the material and psychological needs of its members, such attention may also inspire an appreciation for the relative coherence and stability of that culture.

Certainly, this held true in the case of Lévi-Strauss. Lévi-Strauss came to believe that the intellectual analyses of traditional societies, replete though they may be with mythical thinking and with the vagaries of contingent experience, nonetheless represented more than a prior stage of the species' intellectual evolution. He so admired the seamless functionality of the knowledge possessed by the native peoples he studied that he theorized a second «equally valid» means of knowledge production (1966, p. 22). For Lévi-Strauss, the aesthetic coherence and situated sensitivity of traditional knowledge evidenced a different quality of know-

ing than that of a modern technological society. Peoples of traditional societies might be less likely to push out in new directions on purely rational grounds than those of the modern world, but they appeared to study and to appreciate the nuances of world about them more deeply and to feel as though they understood their own relationships with that world.

Lévi-Strauss' concept of what he called the «science of the concrete» (ibid) reflects both respect for the manner in which the contingent intermingles with the structural within the science of traditional societies and an attention to the contributions of contextual considerations to all scientific thought. In his argument, Lévi-Strauss noted that contextual attributes often serve in advancing any scientific enterprise, citing physics and chemistry as examples of disciplines within which considerations of «secondary qualities» had led to new explanatory frameworks. In the same breath, he spoke of traditional mythical thought functioning as a «liberator» through its exemplary insistence that knowledge be made meaningless through what he viewed as modern society's unilateral move toward logic and abstraction.

As a scholar, Lévi-Strauss was drawn to areas of human experience that Piaget explicitly avoided due to their subjective nature – emotion, aesthetics, and existential concerns (Piaget 1952). In struggling to categorize the organizing logics of ubiquitous cultural forms, Lévi-Strauss looked to uncover a template governing the expression of the unconscious impetuses and longings that Freud had theorized. In reducing local socio-historical expressions to the algebraic relationships of linguistic structuralism, however, Lévi-Strauss often had to perform daring conceptual leaps, some more daring, in retrospect, than could be credibly justified (Kurzweil 1980; Leach 1970). Language, as a human capacity, stands in a different relationship to algebraic analysis than do cultural forms such as myth, kinship, and cuisine. Certainly formal logic and math, as tools, have as yet provided limited purchase within the realm of the human subconscious.

Nevertheless, the work of Lévi-Strauss does serve to emphasize the role aesthetic sensibilities, unconscious drives, and local context play in the construction of all human thought, and, in particular, the part they *must* play in nurturing situated relevance and existential meaning.<sup>4</sup> In so doing, and in evoking the contributions of contingent experience in the formulation of all cultural forms, Lévi-Strauss provides implicit counterpoint to Piaget's hope that logical and mathematical processes might play a preeminent role in the conceptualization (and advancement) of social and psychological realities.

## The Logico-Mathematical Centrism of Piaget

Piaget first located a developmental trajectory in children's appreciation of logical and mathematical realities in the course of conducting some research for Theodore Simon, a French pioneer of psychometric evaluations (Mayer 2005). For a psychologist of Piaget's disposition, such a trajectory intimated of – perhaps even recapitulated – the evolutionary trajectory of the human capacity to reason. Piaget devoted the rest of his long career to studying what he saw as humanity's biologically rooted, socially mediated propensity to reason logically, theorizing that this propensity might provide necessary and sufficient means to construct increasingly sophisticated forms of moral reciprocity within modern societies (Chapman 1988; Piaget 1965).

By confining his own research to the logico-mathematical realm, Piaget was able to develop an exacting experimentalism that reliably generated significant psychological findings. Although he has been fairly accused of under-theorizing the socio-historical dimensions of his investigations (cf. Rogoff 2003), Piaget always expected cultural and individual divergences in the pace and play of logico-mathematical development. It was the consistent sequence in which certain forms of reasoning seemed to get constructed over time that most excited him and that led him to imagine that such a progression spoke to the possibility of humanity's continued cognitive evolution.

Piaget did not only attend, then, to the basic logics Lévi-Strauss employed in his efforts to chart universal cultural categories, but rather worked to elaborate developmental pathways to the more sophisticated logical and mathematical forms that he believed might support the ongoing development of human consciousness. As an epistemologist, however, Piaget struggled to reconcile the conceptual contingencies of the developmental constructivism he theorized and his driving aspiration to locate the final or, as he put it in the first quote below, «innermost» analytic dimensions of human knowing. Together, the following two quotes suggest something of this ambivalence. They are both from his brief text, *Structuralism* (1968/1970).

«Once an area of knowledge has been reduced to a self-regulating system of «structure,» the feeling that one has at last come upon its innermost source of movement is hardly avoidable» (p.14).

«Whereas other animals cannot alter themselves except by changing their species, man can transform himself by transforming the world and can structure himself by constructing structures; and these structures are his own, for they are not eternally predestined either from within or from without» (p. 119).

Although the second quote above expresses a considered appreciation of the contingent dimensions of human understanding, the first conveys Piaget's sense that structuralists might nonetheless

conceptualize reality in final terms. In large part, this apparent contradiction results from Piaget's use, throughout this text, of different senses of the term «structure.» In the first quote above, Piaget likely has the logico-mathematical structures he theorized primarily in mind. Piaget's research interests remained forever rooted in his desire to comprehend the development/evolution of logico-mathematical structures. As can be seen, logical and mathematical structures remain stable within specified premises.

In the second quote, Piaget is speaking of psycho-social frameworks, which tend more toward contingency and fluidity – of the sort of frameworks that Piaget hoped would provide for the continued evolution of human intellectual capacity. To Piaget's mind, such frameworks must not remain static, but rather must continually evolve to reflect modern society's advancing scientific understandings. Piaget therefore objects here to what he views as an over-emphasis on the synchronic, that is to say, on the elements that remain stable in a structure over time, in the work of Lévi-Strauss. As we have seen, Lévi-Strauss explored – and celebrated – traditional cultural expressions of human needs and longings, expressions which had remained stable and comprehensive resources for their societies throughout those societies' known history.

As soon, though, as one recognizes a human capacity to «structure» and so transform human realities, as Piaget does in the second quote, the interaction between an individual and the material world that Piaget saw as essential to cognitive development must be viewed as an interaction between a social mind and a socially defined reality as, indeed, Lev Vygotsky (and others) promptly argued (Vygotsky 1987). At this point, the interrelation of all structures and all ongoing interpretation must be reformulated as a dynamic feedback system. Structures are not discovered, but are constructed (and continually transformed) through the ongoing interpretation of the dynamic relationships they signify – just as Piaget theorized in the development of formal logical and mathematical reasoning. The (culture-bound) construction of adaptive and interpenetrating conceptual frameworks of every variety never ends.

This necessary play between a developing rational sensibility and a broader, also dynamic, culturally charged context actually provides openings for the intellectual autonomy and agency whose nurture Piaget saw as the guiding aim of democratic educational systems (Piaget 1973). Not only must children construct a stable appreciation of material realities, as Piaget famously argued, they must also construct and employ a related system of logics in interpreting the contradictions and complexities of the social world and in formulating constructive, moral actions within that world (Piaget 1965). A personal command of logical forms may allow for independent reason, but one's social world creates a practical

context and provides an organizing set of premises for moral action.

Such layered complexity – and the conceptual confusion to which it quickly leads – goes a considerable distance in justifying my call for the contextual grounding of all structural analysis. Any social or psychological dynamic dwells within and in relation to diverse social and psychological conditions: that is to say, within and in relation to innumerable matrices of potential structural forms. Structural analysts can approach any human reality from a great variety of angles. As we have just seen, in briefly contrasting two quotes from Piaget drawn from the same slim volume, «structures» vary tremendously in the nature and significance of their interpretive play.<sup>5</sup>

### System and Agency in the Work of Foucault

Foucault's work foregrounds this conceptual plurality by focusing on the idiosyncratic aspects of several of the historically located semiotic systems – Foucault termed these systems «epistemes» – within which Western social science has been constructed. All human understanding emerges in relation to the conceptual capacities and constraints of an underlying semiotic system, rendering the resultant knowledge contingent on the assumptions, methods, and meanings of that system. Certain types of conceptual innovation or departure will prove more or less likely within a given system, then, as the coherence of any system of meanings relies – to varying degrees – upon the maintenance of some set of underlying assumptions and methods.

A postmodern neostructuralism provides a place for Foucault's notion of contingent emergence, which Piaget deemed «pretty nearly incompatible with the idea of structure» (Piaget 1965, p. 61).<sup>6</sup> Psychological and psychosocial phenomena, though forged in relationship with Foucault's historically located *epistemes*, can still be seen to retain structural characteristics of various orders (as will any semiotic system itself). Even social and psychological phenomena that appear radically discontinuous remain theoretically open to ever deeper – potentially inaccessible – dimensions of structural play. For example, sexual orientation, though likely structured in some manner at a biological level, is also realized as a function of its interplay with historical social realities and, within any social reality, will find diverse expression based on individual experience and psychological propensities.

As noted, Foucault's early work has been commonly read to claim that the conceptual framing of a culture creates a grid of intellectual possibility over which individuals have little or even no personal control (Paras 2006). Certainly Foucault did emphasize the organizing force of such frames and their role in maintaining existing systems of political power. One of Foucault's principle concerns at

this time, however, was to decenter modern assumptions of intellectual transparency, which intellectuals such as Piaget assumed might afford a final knowledge. In response, Foucault stressed the need to reveal and claim the assumptions and metaphors that necessarily structure and so enable any episteme and within which we are forever, therefore, in some fashion bound.

At the same time, Piaget's vision of the essential roles of rational analysis and intellectual innovation within any knowledge construction system provides a needed corrective to Foucault's early portrayals of semiotic systems as exhaustive determiners of social reality. In emphasizing the play of human agency, Piaget – and the Enlightenment tradition more broadly – provide an opening for the complementary interest Foucault took toward the end of his life in an individual's freedom to cultivate the «arts of living» (Paras 2006).<sup>7</sup> Likely Piaget's greatest recent intellectual heir in this particular respect is post-analytic philosopher Richard Rorty, who emphasized a human capacity to generate new problematics and new languages in response to depleted and constraining discourses (Rorty 1982, 1989).

Contrasts between Foucault and Lévi-Strauss highlight related tensions within structuralist conceptions of human meaning. Foucault, in foregrounding the contingencies of all knowledge construction systems, provides necessary corrective to Lévi-Strauss' tendency to view traditional societies as unadulterated expressions of an essential humanity. Perhaps ironically, Foucault's analysis of Western epistemes also suggests the inevitability of semiotic change as a dynamic function of meaningful shifts within all cultures, traditional and modern. For his part, Lévi-Strauss, in implicating a scale of differing levels of cultural sensitivity both to local context and to unconscious human needs, balances Foucault's emphasis on the arbitrary and historically derived aspects of knowledge construction systems.

### Neostructuralist Social Science

Currently, structural claims within the social sciences are subjected to multiple methodological requirements. To establish significance, a social scientist must provide an analysis of some dynamic system that can be seen to organize human experience. To achieve scientific credibility, the resulting analysis must be based on reliable data that have been collected through a replicable data collection procedure. The analysis must also be seen to build from those data in a rational manner that «makes sense» to the scientific community in light of the analyst's stated purposes.

To these ends, dense experience with its multiple interpretive possibilities is winnowed by some means. A phenomenon is defined, made salient, and investigated. A structural analysis emerges. Neostructuralism subsumes this process, and then asks

– what of it? How, the neostructuralist queries, is one to recognize, let alone apprehend, the *implications* of this proposed analysis in the absence of a return to the psycho-social context its author presumes to edify? Martin Schwab, in his introduction to the English translation of Frank's text, puts it this way: «The structuralist reduction of meaning overlooks that a network of relations among signifiers always occurs as context. The structure of the structuralist, all-embracing and productive as it is to be, is never given otherwise than in the form of some concrete context. ... The phenomenal and contextual element is at least epistemologically primary to the order or structural element it exhibits. Structure and context are not two entities that exist separately and act upon each other. They only exist jointly, and as mutually determining. This ontological feature might be called «interexistence»» (Schwab 1989, p. xxxii).

The claim I make here is that this «interexistence» must be refracted methodologically if one seeks to adequately ground any normative claims about social practices. This premise can be seen to require an additional analytic dimension. The neostructuralist social scientist, therefore, having conceptually isolated a dynamic structure, turns to a richer cross-section of data in hopes of spying – at some remove – the proposed structure at work within a more fully represented world. Does the theorized structure (partially) describe or (partially) predict anything worthy of note within a relevant human context, or does it vanish into a hailstorm of untreated (and unimagined) variables?

### A Case in Point

What such conceptual commitments might ultimately mean within social science research remains to be seen, but I can offer one example based on my doctoral research (Mayer 2006). In that work, I sought to analyze the manner in which what I term «interpretive authority» operates in six pedagogically diverse high school English classrooms (Mayer 2007). Arguing that the *framing* of interpretive issues, the *developing* of interpretive possibilities, and the *evaluating* of interpretive claims together represent a structural analysis of all collaborative interpretive processes, I analyzed the extent to which students were asked to enact all three of these interpretive phases.<sup>8</sup>

As studies of pedagogical discourse now commonly combine linguistic with broader psychological and sociological analyses in order to propose normative claims regarding classroom practice, such work highlights the structural complexity that is always at play within any social setting and therefore any psychological process – in this case learning (Cazden 2001; Lemke 1990; Mercer 2007). Such work challenges, for example, the notion that psychological dynamics can be usefully considered to the exclusion of sociological dynamics in the class-

room – or visa versa.<sup>9</sup>

Based on findings from the reliable and comprehensive coding of two entire class period transcripts from each classroom and on other quantitative measures, I theorized three basic balances of interpretive authority in the classroom: teacher-orchestrated, student-orchestrated, and co-constructed. Interview data supported this analysis: each of the six teachers articulated a set of pedagogical priorities that corresponded to my coding of the interpretive authority distribution in that classroom.

Then, to investigate the distinctive qualities of discourse associated with these different balances, I read the transcripts for the *participant frameworks* established (Goffman 1974, 1981; Goodwin 1990; O'Connor/Michaels 1996). To locate participant frameworks, one reads for the ways in which propositional content comes to be constructed and ratified across multiple participant turns. In so doing, a participant framework analysis provides a glimpse of a classroom's essential complexity as it is evidenced in language.

Although the play of the structural analysis remained visible within the contextual analysis, the participant framework lens complicated that structural analysis in an edifying and, as I am arguing, necessary manner. Classrooms that clustered within either the co-constructed or the student-orchestrated categories were found to vary along other pedagogically significant lines, such as manner of questioning and quality of teacher attention. Similarly, classrooms that classified differently were found to share other significant characteristics, such as overall pace of conversation and quality of attention to the text.

Such differences between the various enactments of a given interpretive authority balance serve to remind both researcher and reader that inspiring interpretive agency (for example) cannot simply be thought a matter of enacting a given set of participation guidelines, but must also be viewed as an interpersonal engagement framed by a complex set of human influences. Indeed, findings suggest that students' willingness to invest in a class conversation may well derive more from the quality of attention received from the teacher than from the structural parameters of the interpretive roles the students have been asked to play (Mayer 2007).

Traditional learning research, with its heavy emphasis on randomized samples and statistical models, has often provided findings whose practical implications – even when adequately theorized – are quickly lost amidst the conceptual din of a classroom. Establishing and maintaining an intellectually generative and personally meaningful pedagogical environment requires that a teacher continually balance the demands of multiple structural dynamics, contextual classroom features and unanticipated contingencies. Pertinent psychological and sociological analyses necessarily weigh in differently depending, for example, on students' home lives

and school cultures, the matter being studied, and the classroom's interpersonal dynamic on a given day.

Indeed, classroom practice is so irreducibly dense with theoretical implication that unilateral attention to a single line of investigation risks obfuscating the broader implications of any classroom reality. Naturally, this risk becomes even more pronounced when normative claims are advanced based on that one conceptual strand of research and theoretical review. Twentieth-century educational psychology may well represent the paradigmatic case of social science gone awry in this manner.

I have therefore proposed that comparative social science investigations employ two levels of focus – one designed to isolate and investigate a structural phenomenon and a second designed to provide a richer human perspective on the phenomena that the structural analysis is intended to inform. Such a pairing provides the conceptual resources needed for the double(d) movement Lather (2007) has called for between the meanings our conceptualizations reveal and those that they will just as reliably obscure. Such a movement, in turn, provides opportunities to shift between multiple analytic angles in a non-linear fashion. Readers are given the opportunity to intuit unarticulated distinctions and commonalities between the research emphases of related studies based on unanalyzed contextual features of those studies.

## Conclusion

Joining structural and contextual analyses in a principled manner promises to help correct for the over-theorizing of structural forces that has marked much social science research, limiting both its enduring theoretical significance and its practical value. Multiple analytic dimensions will prove relevant within any human context, requiring that one make the relations between different psychological and sociological possibilities within a research context visible in some manner. Only then can one begin to gauge the extent to, and the conditions within, which a given line of inquiry may prove useful.

At the same time, the pairing of structural and contextual analyses places richly situated observations and hypotheses into conversation with those broader psychological and sociological dynamics that have proven amenable to structural analysis. Rather than abandoning attempts to articulate the character and conditions of more and less satisfying forms of human experience in broad terms, a neostructuralist scholar seeks to speak across and in relation to the various human differences that distinguish any social context from another, drawing upon such differences to construct increasingly nuanced analyses of humanity's myriad social worlds.

A postmodern neostructuralism must seek, then, to speak across and *in relation to* the various human differences that distinguish any social context

from another. In so doing, contemporary social scientists will be called upon to conceptualize informally linked theoretical matrices and their *various* psycho-social possibilities. These matrices can be placed into relationship, in turn, with relevant societal goals, local considerations, and various practical issues and concerns. Such theoretical sophistication can only be achieved through a principled methodological engagement with context.

A postmodern neostructuralism can also support social scientists and their readers in recognizing the potential contribution of any well grounded structural analysis: the glimpse it provides, however partial and provisional, of some system that works to organize human reality. Focus can thereby be sharpened as to the relationships between such analytic lenses and attention can be brought to the evidence of their interplay within the context at issue. Claims of interpretive priority and finality can then be abandoned in favor of more generative debates.

## Footnotes

- 1 An earlier draft of this paper was presented at AERA 2008.
- 2 The role Piaget theorized for social mediation in the development of logical reasoning is often underemphasized and even ignored by some theorists (see Chapman 1986, 1988).
- 3 I am thinking here of Neo-Piagetian cognitive scientists especially, such as Fischer (2006) and van Geert (1996), who theorize general developmental processes. More broadly, though, the organizing role of language has not historically been interrogated within the Piagetian tradition, even within the more narrative-based realm of moral development, as in Kohlberg's work (1987).
- 4 Dewey developed this argument, which was central to his conception of democratic knowledge construction, at some length across the course of his career (Dewey 1930; Mayer 2007).
- 5 Merquior (1986) also rightly points out that Piaget's emphasis on self-regulation as essential to structure (along with wholeness and transformation) does not transport across all academic areas.
- 6 It must be noted that Foucault did not share the broad assumptions of Piaget and Vygotsky regarding the general forward momentum of modern societies. Neostructuralism need make no particular commitments in this regard.
- 7 The Enlightenment tradition, however, would also have been seen by Foucault as conflating the needs and desires of individuals with the requirements of liberal democratic societies. In undermining the notion of transparent understanding, Foucault sought also to undermine the notion of an ideal or perfectible society.
- 8 Classroom research has demonstrated that students are generally asked only to participate in the second phase of the interpretive process, that is, in developing interpretive possibilities in response to issues that a teacher has framed, and which are subsequently evaluated by the teacher (Mehan 1979).
- 9 Even when one constrains one's analysis to either psychological or sociological concerns, multiple dimensions of whichever domain interpenetrate. Within psychological studies of learning, for example, individual intellectual propensities structure a student's efforts toward understanding as surely as the child's developmental phase does, etc. Within the sociological field, students' class backgrounds, the native culture of a student's home, and the racial politics of the school environment will all find linguistic expression in a classroom – shaping the learning that unfolds there (Pennycook 2001).

## References

- Beauvoir, Simone de: *The Second Sex*. New York: Random House 1952
- Bhabha, Homi K.: *The Location of Culture*. London: Routledge 1994
- Butler, Judith: *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge 1999
- Cazden, Courtney B.: *Classroom Discourse: The Language of Teaching and Learning*. Portsmouth: Heinemann 2001
- Chapman, Michael: The structure of exchange: Piaget's sociological theory. In: *Human Development* 29(1986), vol. 2, pp. 181–194
- Chapman, Michael: *Constructive Evolution*. Cambridge: Cambridge University Press 1988
- Connell, Michael/Mayer, Susan: *Structuralist Sensibilities in the Educational Domain*. Unpublished paper presented at the Jean Piaget Society meeting; Quebec, Ontario 2008
- Dewey, John: *Human Nature and Conduct*. New York: Random House 1930
- Dosse, François: *History of Structuralism*, vol. I. Minneapolis: University of Minneapolis Press 1997
- Duckworth, Eleanor: «Tell Me More»: *Listening to Learners Explain*. New York: Teacher's College Press 2001
- Fanon, Frantz: *Black Skins, White Masks*. London: Pluto 1986
- Fischer, Kurt W./Bidell, Thomas R.: Dynamic development of action, thought, and emotion. In: Richard M. Lerner (Ed.): *Handbook of Child Psychology*. Vol. 1: Theoretical models of human development (1997). New York: Wiley 2006
- Foucault, Michel: *The Order of Things: An Archaeology of the Human Sciences*. London: Tavistock Publications 1970
- Frank, Manfred: *What is Neostructuralism?* Minneapolis: University of Minneapolis Press 1989
- Gardner, Howard: *The Quest for Mind: Piaget, Lévi-Strauss, and the Structuralist Movement*. Chicago: The University of Chicago Press 1972
- Goffman, Erving: *Frame Analysis: An Essay on the Organization of Experience*. New York: Harper and Row 1974
- Goffman, Erving: *Forms of Talk*. Philadelphia: University of Pennsylvania Press 1981
- Goodwin, Marjorie Harness: *He-Said-She-Said: Talk as Social Organization among Black Children*. Bloomington: Indiana University Press 1990
- Kohlberg, Lawrence: *Child Psychology and Childhood Education: A Cognitive Developmental View*. New York: Longman 1987
- Kuhn, Thomas: *The Structure of Scientific Revolutions*. Chicago: Chicago University Press 1962
- Kurzweil, Edith: *The Age of Structuralism: Levi-Strauss to Foucault*. New York: Columbia University Press 1980
- Kvale, Steinar: *Psychology and Postmodernism*. London: Sage 1992
- Lather, Patti: *Getting Smart: Feminist Research and Pedagogy within the Post-modern*. New York: Routledge 1991
- Lather, Patti: *Getting Lost: Feminist Efforts Toward a Double(d) Science*. Albany: SUNY Press 2007
- Leach, Edmund: *Claude Lévi-Strauss*. New York: Viking Press 1970
- Lemke, Jay L.: *Talking Science: Language, Learning, and Values*. Norwood: Ablex 1990
- Lévi-Strauss, Claude: *Structural Anthropology*. New York: Basic Books, Inc 1963
- Lévi-Strauss, Claude: *The Savage Mind*. Chicago: Chicago University Press 1966
- Mayer, Susan: The Early Evolution of Jean Piaget's Clinical Method. In: *History of Psychology* 8(2005), vol. 4, pp. 362–382
- Mayer, Susan: *Analyzing Agency and Authority in the Discourse of Six High School English Classrooms*. Unpublished Doctoral Dissertation: Harvard University 2006
- Mayer, Susan: The Ideal as Real: John Dewey and the Social Construction of Moral Coherence. In: *Journal of Curriculum and Pedagogy* 4(2007), vol. 2, pp. 176–186
- Mayer, Susan: *Conceptualizing Interpretive Authority in Practical Terms*. In: *Language and Education* 2009, pp. 1–18
- Mehan, Hugh: *Learning Lessons: Social organization in the Classroom*. Cambridge: Harvard University Press 1979
- Mercer, Neil: *Dialogue and the Development of Children's Thinking: A Sociocultural Approach*. London: Routledge 2007
- Merquior, José G.: *From Prague to Paris: A Critique of Structuralist and Post-Structuralist Thought*. London: Verso 1986
- O'Connor, Mary Catherine/Michaels, Sarah: *Shifting Participant Frameworks: Orchestrating Thinking Practices in Group Discussion*. In: Deborah Hicks (ed.): *Discourse, Learning, and Schooling*. Cambridge: Cambridge University Press 1996, pp. 63–103
- Olssen, Mark: *Michel Foucault: Materialism and Education*. London: Bergin & Garvey 1999
- Paras, Eric: *Foucault 2.0: Beyond Power and Knowledge*. New York: Other Press 2006
- Pennycook, Alastair: *Critical Applied Linguistics: A Critical Introduction*. Mahwah: Lawrence Erlbaum Press 2001
- Peters, Michael/Wain, Kenneth: *Postmodernism/Post-Structuralism*. In: Nigel Blake/Paul Smeyers/Richard Smith/Paul Standish (eds.): *The Blackwell Guide to the Philosophy of Education*. Oxford: Blackwell Publishing 2003, pp. 57–72
- Piaget, Jean: *Autobiography*. In: Edwin G. Boring/Herbert S. Langfeld/Heinz Werner/Robert M. Yerkes (eds.): *A History of Psychology in Autobiography*. Volume IV. Worcester: Clark University Press 1952, pp. 237–256
- Piaget, Jean: *The Moral Judgment of the Child*. New York: The Free Press 1965
- Piaget, Jean: *Structuralism*. New York: Harper Torchbooks 1970
- Piaget, Jean: *To Understand is to Invent: The Future of Education*. New York: Grossman's Publishers 1973
- Polanyi, Michael: *Personal Knowledge: Towards a Post-Critical Philosophy*. Chicago: University of Chicago Press 1958
- Rogoff, Barbara: *The Cultural Nature of Human Development*. Oxford: Oxford University Press 2003
- Rorty, Richard: *Consequences of Pragmatism*. Minneapolis: University of Minnesota Press 1982
- Rorty, Richard: *Contingency, Irony, and Solidarity*. Cambridge: Cambridge University Press 1989
- Rose, Nikolas: *Inventing Ourselves, Psychology, Power, and Personhood*. Cambridge: Cambridge University Press 1996
- Saussure, Ferdinand de: *Course in General Linguistics*. New York: Philosophical Library 1959
- Schwab, Martin: Foreword. In: Manfred Frank: *What is Neostructuralism?* Minneapolis: University of Minneapolis Press 1989, pp. x–xliv
- Sinclair, John M./Coulthard, R. Malcolm: *Towards an Analysis of Discourse*. London: Oxford University Press 1975
- Geert, Paul van: *Dynamic systems of development: Change between complexity and chaos*. London: Harvester-Wheatsheaf 1996
- Vidal, Fernando: *Piaget before Piaget*. Cambridge: Harvard University Press 1994
- Vidal, Fernando: *Immanence, affectivité, et démocratie dans Le jugement moral chez l'enfant*. In: *Bulletin de Psychologie* 51(1998), vol. 5, pp. 585–597
- Vygotsky, Lev: *Thought and Language*. Cambridge: MIT Press 1987