Composition Studies and Interdisciplinarity

Andrea Lunsford, excerpt from "The Nature of Composition Studies," 1991
We can trace the **origins of composition** to the 5th c. BC, but more recent conditions--shifts in material conditions and industry and the expansion of the educated class--in the 19th century in the United States are probably most responsible for the emergence of composition. (8)
1. Increasingly, we understand that disciplinary characteristics are not inherited or taken for granted, but rather that they are constructed, that by writing theoretical/practical/disciplinary contexts, **we fashion them ourselves**. (9)
2. Composition challenges "divisions between **disciplines**, between **genres**, and between **media**." (9). Multidisciplinarity is difficult. It places a burden on graduate students.
3. Recent pushes to extracurriculum of composition--interests in both public and private arenas of writing. (10)
"At the very nexus of composition studies' terministic screen, literacy encompasses highly theoretical concerns over the relationship among thought, language and action; historical concerns over the organization and development of literacy; and pragmatic concerns over how literate behaviors are nurtured or practiced" (11).
On composition's nature: "large and loosely bounded, informed by cross-disciplinary, trans-institutional, multiply mediated, multi-genred, multi-voiced, and radically democratic principles" (11).
It's difficult to at once keep abreast of the continual theorization of composition while also extending what has already been theorized. (11)

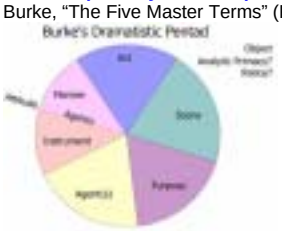
Phelps, "Composition Studies," *Encyclopedia of Rhetoric and Composition, 1996.*
Composition as an **amalgamation** with a **teaching tradition**, **new science** and **new rhetoric**. Points toward complexities; grapples with questions about how to organize the field.
"But a better metaphor for a discipline that has been unable and increasingly unwilling to fix its self-understanding or settle on a singular history may be the flow of a **river** fed by many streams, with converging and diverging tributaries and branches, a river in which composition studies is one current intermingling untraceably with others" (130).

Nystrand, et al. "Where Did Composition Studies Come From?", *Written Comm*., 1993
Like Bakhtin, Halliday (1978) views texts—and language, for that matter—not as the fixed objects (or abstractions) that Saussure, Chomsky, and the structural linguists posit, but rather as sites of an unfolding process of negotiation and contention over meaning among conversants: 'The essential feature of text, therefore, is that it is interaction. The exchange of meaning is an interactive process, and text is the means of exchange" (p. 139)" (297).
Chart p 302: Formalism (text as object); Constructivism (individual act of writing, reading), Social Constructionism (canon, community), Dialogism (text as discourse). These reflect shifts from empiricism to structuralism to dialogism. Transmitters or transmission models slide toward conversancy.

Emig, Janet. "The Tacit Tradition: The Inevitability of a Multi-Disciplinary Approach to Writing." *The Web of Meaning*. Montclair, NJ: Boynton-Cook, 1983.
"Certain kinds of knowing and doing, summed, qualify as emblems of mempership and participation. Among the most significatnt are ready understanding and colloquialuse of that discipline's (1) lexicon; (2) syntax and rhetoric; (3) definitions of evidence, including the methods for acquiring it and the mores for assessing it; and (4) its root metaphors and governing paradigms" (147). One more: "demonstrating awareness and command of its 'tacit tradition'" (147). ; Conditions of disciplinarity: 1. agreement in esteemed scholars attached to seminal works; 2. shared sensibilities about the important questions and the aims of composition studies in a very general sense; 3. agreement that comp develops theory from a pre-paradigmatic position. (147).
"explanatory matrix" and Thomas Kuhn (148) **[rel. to Weaver]**
emphasis on individuality: how might this extend the L&T article's mention of textual, social and individual? Is Emig predisposed to the solitary mind of the individual writing (and all of the cognitive science involved)? (bottom of 148)
Rosenblatt on Dewey and transactives (150). Taken to biological programming--compulsions to write are inherently biological. (152)
From Elbow--believing game versus doubting game (155). Composition is distinct because it, unlike other academic disciplines, leads with the believing game. We have basic predilections for that which students can do, rather than what they cannot.

Interdisciplinarity and Composition; Scholarly Reading Processes

Burke, "The Five Master Terms" (PDF) plus pages from LWP, diss. (CNK)



Ann Berthoff, "Is Reading Still Possible?" in *The Sense of Learning*, 1990
"Interpretation is a dialectical activity because we are continually discovering the interanimation of words and thereby the interdependence of what is said and what is meant" (107). "Richards, Freire, and Roseblatt are all pragmatists, which means that they ask not 'Does it work?' or 'Can we afford it?' but 'What difference would it make to our practice if we proceeded from these principles?'" (113).
Berthoff reasons a case for hermeneutical reading in combination with triadic mediation or three part relations between reading the world, the word (audits of meaning). "Reading and writing both depend on having a framework of expectations to guide procedure" (111).

Louise Rosenblatt, "The Transactional Theory: Against Dualisms," 1993
"Pragmatic transactionalism" is practically interested in complicating language as culturally significant. "Pragmatic transactionalism has led me to envision speaking and listening, writing and reading as interrelated aspects of the individual's transactions with the environment" (383). Ignoring context would be fallacious. Two kinds of authorial reading: 1. expression oriented (writerly) 2. reception oriented (readerly). Critical is to be selective—these relate to the democratizing relevance of literacy and esp. critical literacy.

Lauer, Janice. "Composition Studies: Dappled Discipline." Rhetoric Review. 3.1 (1984): 20-29.
Lauer sets out to characterize the field's idiosyncracies. **Dappled** refers to a peculiar pattern of markings or spots. For Lauer, key terms include Habermas's notion of **consensus** and Toulmin's notion of the **epistemic court**--"a community of experts who reach consensus in accord with their interpretations of the discipline's basic tasks" (22). In some ways, this might hold up to the echo chamber as the yes-ist nodding-heads that group together to declare what matters and, more importantly, to reject or refuse that which does not matter (to them). For Habermas, a "rationally motivated consensus depends on upon the freedom to move from a given level of discourse to higher levels of abstraction" (22). [See Habermas's four levels on p. 22]
Definition of a discipline: "a discipline has a special set of phenomena to study, a characteristic mode or modes of inquiry, its own history of development, its theoretical ancestors and assumptions, its evolving body of knowledge, and its own epistemic courts by which knowledge gains that status" (20).
Composition is distinctive because, rather than assuming an indifferent or detached relationship to knowledge formation, composition is built on social knowledge (23). Another problem for composition is the diversity of journal readership and the problem of a sufficiently expert audience for resolving consensus on theoretical orientations. Lauer tells us, too, that "theory does not easily find effective rhetors to persuade the larger audience" (24).
"The vastness and density of the problem domain itself offer a rich field of inquiry for the enterprising but a terrain of quicksand for the unwary" (25). This is the reason why many who find the field don't fair well with it.
"Composition studies has so far **resisted pressures to reduce verification to available instruments** like T-Unit analysis, analytic, holistic or even primary trait scoring, having come to recognize that such measurement tools are too gross to assess more complex behaviors like planning and audience adaptation" (26).
Training in modes of inquiry is another vexing challenge for composition, which, as Lauer characterizes it, assumes relevance and responsibility in all levels of literacy. She ends by casing the field in terms of **comedy** and calling it a **"rock-bottom realm."**

Louise Phelps, *Composition as a Human Science* (CHS): pp. 218-241, 1988.
"The concept of **attunement** comes from ecological psychology, where it was proposed as an alternative to theories of memory as search through storage…. Past experience (that is, learning) 'sets the stage' for the organism to grasp not only the sameness of information, but its novelty. This process is one of differentiating the new from the invariant information, rather than of matching a template—memory traces or schemas—to new input" (221).

The Making of Meaning

Janet Emig, *The Web of Meaning*, 1983.
"The **Origins of Rhetoric**: A Developmental View"—rhetoric as "purposive verbal behavior." Parental expansions. "Mother is the first co-speaker/co-writer" (58). Relate this to Wells.

Ann Berthoff, The Making of Meaning, "Composing is Forming," 1980.
"To speak of mind could represent an unembarrassed recognition of the fact that everything we deal with in composition theory is fundamentally and unavoidably philosophical" (61).

George Kelly, *A Theory of Personality*, 1955/1963
Postulates and corollaries among theoretical constructs related to personality. Determinism and free will (cutting the pie)—the force of surrounds, expectations. On determinism (a critical point brought up by Kirschner rel. to Vygotsky): "For one thing, an element does not determine the constructs which are used to subsume it; for another, an element which falls outside of the purview of a construct is independent of it" (21). Determinism is complex; it has a part in determining character.

Phelps, "The Domain of Composition,"1986
Domain: "space one controls"; "Whatever tensions, conflicts, and slippages mark the discourse transaction, it remains, like marriage and warfare, an inherently co-personal activity" (4).

Reading Theory: Psycholinguistic

Frank Smith, *Understanding Reading1971/1994.*
Smith's all about how reading happens. Chapters on Bottlenecks of Memory (rel. to holarchy in Weaver from Koestler), Letter Identification, Word Identification. Basically, he suggests that phonics isn't necessary. Noise and static—how we experience information. "The sounds of language and the visual information of print are surface structures of language which do not represent meaning directly. Meaning resides in the deep structure of language, in the intentions of speakers and writers, and in the interpretations of listeners and readers" (47). Redundancy as purposeful (50). Concerned with school setting—teachers and students.
Wells: **Story grammars (40)—paradigms for stories—used to relate conventional sequences. Aid to prediction.

Stephen Kucer, *Dimensions of Literacy*, 2005
Disposed to school settings. Interested in literacy development as outward

moving—centrifugal, outward from cognitive to linguistic to sociocultural to developmental. He is making a case for scalability in psycholinguistic development. It involves memory and a visual array. Includes several examples of children's efforts to write for school.
rel. to Bruner: "The **tools** support the learner in understanding the events that are unfolding in the immediate environment" (263).
Wells: Child-parent interaction: Section titled "The Adult as Demonstrator, Mediator, and Guide"—here, Kucer works on adults' responses to form and meaning. Story-structures
Keywords: information encapsulation, interpsychological (ref. to Vygotsky) and scaffolding (ref. to Bruner)

Early Cognitive Theory

From the MIT Encyclopedia of the Cognitive Sciences. 1999. On Computational Theory of Mind, Situatedness/Embededness, and Schemata.
Schema as scaffolds for recall. Slots? Schemata tend to be contextually located, yes? Whereas frames are invoke situation?
Phelps, Louise. "Cross-Sections in an Emerging Psychology of Composition." 1984. "**Compositionists teach not a body of knowledge, but a skilled performance**" (28). "Despite these pioneer efforts, compositionists have as yet no broadly shared schema for making sense of the flood of current work on psychological aspects of writing" (30); context (35); Bransford and McCarrell (39); Spiro (40); Tannen (41); Frank Smith on bottlenecks (44); tacit/focal (49); Donald Norman (43) LWP: This essay was written by mistake. By mis-hearing the person who asked for "Psychology of Composition" versus "Psychology of Composition." 1988 is LWP's marker for the moment that the field began to be more influenced by cultural studies and humanities more than science.
Written Communication follows some of these threads after 1988. The field moved taking meaning for granted, moving to what do we with interpretations rather than how did we understand it to begin with.
Look at the coherence article in LWP's book. Incoherence and discoherence (cues mesh or cues conflict with each other).
Watch for treatments of schema as static--settled experientially (as in Adams and Collins, Tannen, etc.) **Bartlett would have had us think of schemas not as static structures but as dynamic and evolving.**
To what extent are schemas adrift? Culturally or linguistically?
We still don't know how to deal with the expansiveness of context.
Critical social sciences (on gender, let's say) work on a macro level, far abstracted from the micro-level of particular interactions (local language acts).
Bransford, John and Nancy McCarrell. "A Sketch of a Cognitive Approach to Comprehension." 1974.
"the nature of the click" (190)--what happens when we understand something? Comprehension. What makes the click of comprehension possible?
Word-referrent relationship is too simple (190). "Perception affords more than information about the characteristics of individual objects; it affords information about the spatio-temporal relations among entities that characterize dynamic perceptual events" (191). "manipulanda" (193): grasp-ableness, pick-up-ableness, throw-ableness, heaviness. Bartlett (1932): **effort after meaning (comprehension or cognition?)** JJ Gibson (1966) notion of affordances (193) relational (196): "The preceding discussion suggests that knowledge of entities arises from information about their relations to other knowledge, and that knowledge of relations distinguishes a meaningful object from a 'brute thing.'" (195). relational interdependence (199) and "significances" (199). Relational meaning is helpful for us to explain how we work as teachers. It's also crucial to think about cues as "instructions for creating meaning" (201). In this sense, we are always pushing toward inventive, creative, imagination, etc.
Summary (200): "the grasping of relations" shape--in tension with linguistic comprehension--the comprehender's cognition, alinguistic ability and knowledge activation.
Field dependence (202) *Experience isn't a standalone in constructing meaning; other inputs--language inputs--bear on this. (204) ; We fill in--instigating forces--all of this presumes a kind of logic of language (211).
Car story-grammar: just by adding "submerged" (214), the meaning shifts--an instigating force (summarize); "Of course, not all perceptual relations will have single lexical equivalents" (216). "nog" (219); All language cues? (218)
Norman, Donald. "Twelve Issues for Cognitive Science." 1981. According to LWP, this represents a shift toward something more rhetorical. Certitude: disposed to pure reason, questions emotion, ends with a mix of apologies and confidence (no number 13, for one) Norman takes a computational view and challenges it. He deals with AI (273) and the "billions of interconnections" in our brains. system and information processing (266); two anecdotes: a view of the airplane crash and a view of the classroom (268); Norman acknowledges his predilection for "pure reason" (275) and seems dodgy with "emotion" (275) "there is much more happening" (269); servomechanism systems (269) "My argument is that the situation is not going to be understood until all these different points of view are combined, for the overall classroom behavior is a result of all these forces, no on more fundamental than another" (270).
hyperthreadedness (272); Belief systems (278): belief systems impact "memory and thought." "My brief excursions into this area have left me impressed with how much my own hidden belief structures influence my 'pure' logical inference, memory processes, and social interactions. I suspect that we will find that more of our behavior is thus determined, not less" (279). Consciousness (279): attention, what is it? Development (281): Children, tabula rasa (Postman), little adults, etc. Little value in concentrating on static phases. Emotion (281) (attitude?) Interaction (282) *Language and Perception (283): Norman makes an unusual turn with these, saying basically that until we're through dealing with the other ten issues, these must wait. Lots has been said about them, he tells us before moving right along. Learning (283) Memory (283): "But wait a minute. Why is it that I assume that memories are stored in places. Can't they be distributed in space? (Remember the hologram). They can. [Connects with the idea of bytes in flight.] Perception (283)* Performance (286) This takes up a synthesizing view. Skill (287) Thought (288) Motivation (290)--a possible thirteenth category. How does this enfold affect or attitude or emotion? Is it separable? Environment?
Tannen, Deborah. "What's in a Frame? Surface Evidence and Underlying Expectations." 1979. Tannen talks about frames in terms of **expectation**. "Bartlett contends that an individual 'has an overmastering tendency simply to get a general impression of the whole; and, on the basis of this, he constructs the probable detail" (139). In this sense, schema are probablistic and predictive. Frame applies to "a data-structure for representing a stereotyped situation" (142). Script is the matching of a prototype with what's expected (who brings coffee in the restaurant, for example). "Thus, structures of expectation make interpretation possible, but in the process, they also reflect back on perception of the world to justify that interpretation" (144).
Spiro, Rand. "Constructive Processes in Prose Comprehension and Recall." 1980. Active participant/not meaning in the text—challenging transmission model.; utilization of "Superordinate notions of themes or context" (248) Radical contextuality: "Constructed meaning is the interactive product of the text and context of various kinds, including linguistics, prior knowledge situational, attitudinal and task contexts" (246).
Adams, Marilyn J. and Allan Collins. "A Schema-Theoretic View of Reading." 1979. Slots; Correct ways of reading (1, 18); top-down and bottom-up **[rel. to Weaver and holons, holarchy]**; schematic abstraction is taken together--a synthesizing view (7); stone soup example (9)--what are the unanswered questions. Positions the reader in the experiment. "The power of schema-theoretic models of reading lies in their capacity to support these interactions through a single, stratified knowledge structure and a few basic processing mechanisms" (20).

Reading Theory: Transactional/Humanist

Rosenblatt, *The Reader, the Text, the Poem*. 1978/1994.
transactional: "Transactional theory, they must be reminded, recognizes the text as a necessary, but not sufficient, condition for any literary work of art" (83). "'Transaction' designates, then, an ongoing process in which the elements or factors are, one might say, aspects of a total situation, each conditioned by and conditioning the other" (17).; **efferent**: "I have chosen the term 'efferent,' derived from the Latin, 'efferre,' to carry away.' This term seems to be freer of misleading implications than 'instrumental,' which would in most instances seem appropriately to contrast with 'aesthetic'" (24). **Aesthetic**: "In aesthetic reading, the reader's attention is centered directly on what he is living through during his relationship with that particular text" (25).; **Continuum**: no hard and fast lines. "It is more accurate to think of a continuum, a series of gradations between nonaesthetic and aesthetic extremes. The reader's stance toward the text—what he focuses his attention on, what his 'mental set' shuts out or permits to enter into the center of awareness—may vary in a multiplicity of ways between the two poles" (35).; "The poem, then, must be thought of as an event in time. It is not an object or an ideal entity. It happens during a coming-together, a compenetration, of a reader and a text" (12). Rosenblatt is interested in problematizing the simple stimulus-response model.
Constance Weaver, "Parallels beteen New Paradigms in Science and in Reading and Literary Theories," *Research in the Teaching of English*, 1985
Concerned with co-emerging and re-emerging concepts in sciences and reading/literary theory. "One of the most basic processes is **transaction**, through which entitites are endlessly defined and redefined" (299). Wants to complicate **mechanistic paradigms**, show shifts in perspective toward **organic paradigms**. Both-and of light as wave-particle. Actualization: "The transaction between 'observer' and 'observed' results in the so-called **"quantum leap,"** the simultaneous actualization of one possibility and negation of others" (301)(ref. to Frost and "The Road Not Taken.")."Particles are energy, energy in constant transaction and transformation" (302). "Though many cognitive psychologists think of schemata as relatively fixed mental structures (e.g. Rumelhart, 1980), others consider them to be as transitory as the physicist's particle" (306). "Better yet, one might abandon the term 'hierarchy,' which erroneously suggests exclusive top-down processing, in favor of Koestler's term **'holarchy**.' A holarchy is a hierarchically arranged, open system of holons, with 'countless feedback loops and flexible strategies'" (309).
Berthoff, "Dem. Practice, Pragmatic Vistas" in *The Sense of Learning*, 1988
Wells: "Experience, that is to say [rel. to Boas and Sapir], is never 'merely personal,' and its **social character** is defining" (129). Connect the idea of storying to this; storying is generalizable. "Piaget's structuralism hid this truth from view, though recent study of Vygotsky has helped to reclaim it" (130).
"Any and all ideas can be reduced to **dyadic terms**, with the result that **generative power is lost**; that is to say, transaction will be nothing but **interaction** if it is entertained in the dyadic perspective, as a matter of I'll-scratch-your-back-if-you'll-scratch-mine" (129).

Piaget

Piaget, Jean. *The Origins of Intelligence in Children*. Trans. Margaret Cook. New York: Norton, 1952.
Accommodation (66); Time/space causality (12), trial and error?
How does accommodation work? "not through association, but through differentiation of an existing schema and insertion of new sensorimotor elements among those which already form it" (139). Accommodation is what happens when assimilative processes are interrupted because something doesn't work. (Think of the alimentary model or exploration via sucking.) Also, relative to cognition, organization accounts for the efforts (after meaning?) to equilibrate assimilative and accommodative interactions/transactions (there are differences, yeah?).

Assimilation (differentiated)--recognitory, etc.; From the vantage point of consciousness or behavior, we can say that assimilation is "purely functional--that is to say, cumulative repetition and assimilation of the object to the function" (140). These combine in a kind of scale of adaptation--a simple biological function, P. says. Adaptation, as I read it, applies to sensorimotor intelligence rel. to efforts after equilibration. The other biological function is organization—explained earlier.; smiles (71); **buccal** sphere (59) – mouth cavity; equilibrium and equilibration; intelligence; egocentrism; schema; Baldwin on "circular reaction" (138)--recursion; **alimentary;** "It must be said that the global schema of sucking movements has incorporated into itself these attitudes and that from this moment they form a whole with the schema itself" (133).
"Intelligence does not therefore appear as a power of reflection independent of the particular position which the organism occupies in the universe but is linked, from the very outset, by biological apriorities" (19).
"Nothing is more difficult to define than intention" (147). "Intention is thus determined by consciousness of desire, or of the direction of the act, this awareness being itself a function of the number of intermediary actions necessitated by the principal act" (148). ;"The simplest mind? Is all bodily activity toward intelligence? ;**Habituation** is possible after the infant is emerging into intelligence from pre-intelligence. In the pre-intelligent stages, the biological certainties of organization (regulatory) and adaptation (oscillatory between assimilation and accommodation). Is Piaget is teleological? Possibly not. But is it possible to talk about goals without leaning toward a logic of teleos (teleological). The inventing of means is what he means by intelligence. It is the ability to differentiate that what you can do doesn't depend on what you have already done. Piaget describes himself as a genetic epistemologist.

Vygotsky

Lev Vygotsky, *Thought and Language*. 1934/1986.
unity of consciousness (unit of analysis), play, syncretism, inner speech, autism, "These similarities lead us to assume that when egocentric speech disappears, it does not simply atrophy but 'goes underground,' i.e., turns into inner speech" (33). Age 7-12: "That period is characterized by series of failures of the child's logic in its confrontation with the logic of adults" (165). Collisions and bruises. Shift from mechanistic memory to logical one: "Scientific concepts are not ahead of everyday ones" (191). Concepts become generalizable. Vygotsky's work "was 'rehabilitated' in the course of de-Stalinization" (li).

James Wertsch, *Voices of the Mind*, 1991
rel. to Wells and **where the child is at**: "Vygotsky examined the implications of the zone of proximal development for the assessment of intelligence and for the organization of instruction. With regard to the former, he argued that measuring the level of potential development is just as important as measuring the actual developmental level; with regard to the latter, he argued that instruction should be tied more closely to the level of **potential development** than to the level of actual development" (28). Mediating tools and agency. Agency is always implicated with mediating devices.

Sociocultural Theories of Cognition

Dias, et al., *Worlds Apart*, 1999
Critical of schooling. They are concerned with workplace literacy. Basically, school and work are "worlds apart." "Universities, it appears, have failed to prepare their students to write at work" (5).
"local knowledge" (8, Geertz); "Perhaps one of the most important understandings to emerge from recent studies is the degree to which workplace writing is a collaborative or social activity" (9)" Extracurriculum, etc. This goes to disciplinarity, too.
"Wertsch et al. (1993) go on to trace the roots of this view, drawing on the work of philosophyer Charles Taylor (1985, 1989) and his argument that social science theory is 'grounded' in **a certain tradition of individualism** that permeates our personal and professional lives…a social science that takes the atomistic agent as its basic building block' and leads "to accounts of human mental functioning in which such agency is viewed as being analytically and developmentally prior to sociocultural life.'" (34).

Kirschner and Whitson, *Situated Cognition, 1997*
Set in tension with individual psychology (2); Collection of papers from **1992** AERA conference (3); Overview: Situated cognition is **a work in progress**. against mind-body dualism (4); everyday studies: "knowledge entails lived practices and not just accumulated information" (4); unit of analysis: toward "the sociocultural setting in which activities are embedded" (5); Vygotsky's zone of proximal development (6); Problems with analysis mutually **co-constitutive** [interfunctional bind—rel. to Kucer and Vygotsky?] (6); individuals/complexity -and- "intrinsically social nature of cognition and learning" (7); danger: social determinism; Bourdeiu's capital, field, habitus (8); correction to reading of Vygotsky as deterministic.
"Situated cognitionists have developed complementary means for breaking out of the focus on individuals: by focusing on the structures and interrelations within activity systems; and by linking the community of practice to broader categories of social and political analysis" (6).

Jean Lave and Etienne Wenger, *Situated Learning: Legitimate Peripheral Participation*, 1991
No claims about schools. Legitimate peripheral participation; leaning as a situated activity learners participate in communities of practitioners and that master of knowledge and skill requires newcomers to more towards full participation in the sociocultural activities/practices of a community (29)
Fundamental questions:
p. 36-37: complete participation vs. full participation
Complete participation suggests a closed domain.
"Full participation, however, stands in contrast to only one aspect of the concept of **peripherality** as we see it: It places the emphasis on what partial participation is not, or not yet. In our usage, peripherality is also a positive term, whose most salient conceptual **antonyms are unrelatedness or irrelevance to ongoing activity**" (37).
No single core but many changing centers; peripherality is enabled or *not* which raises issues of access; Community is dynamic=everyone; New or old members, can be peripheral at some point in the negotiation and renegotiation of the world of the community (51); Understanding and experience are co-constitutive (52) Novice and expert are also co-constitutive; Everyone's activity in the system changes; The system and its body of knowledge

Second Generation Cognitive Science

Gilles Fauconnier and Mark Turner, *The Way We Think, 2002*
Keywords/key phrases/key concepts: complexity of commonplace reasoning (18), artificial intelligence (18), conceptual blending (18), Margaret Thatcher and U.S. Presidency (18), disanalogy (20), emergent (21), The Skiing Waiter (21), backstage cognition (23), conceptual integration (23), felicitous blends (24), counterfactuals (31), blending and error (34), analogy/analogical projection (35), Aristotle and Gorgias (36)
"Metaphoric thinking, regarded in the commonsense view as a special instrument of art and rhetoric, operates at every level of cognition and shows uniform structural and dynamic principles, regardless of whether it is spectacular and noticeable or conventional and unremarkable" (17).
"Just as we feel that we see the coffee cup for the simple reason that there is a coffee cup to be seen, so we feel that we see the analogy because there is an analogy to be seen--that is, to be perceived directly and immediately with no effort. But analogy theorists and modelers have discovered, to their dismay, that finding matches is an almost intractable problem, even when, after the fact, the matches look as if they are straightforward. Nobody knows how people do it" (19).; "The brain is a highly connected and interconnected organ, but the activations of those connections are constantly shifting" (22).
"[H]uman beings are exceptionally adept at integrating two extraordinarily different inputs to create new emergent structures, which result in new tools, new technologies, and new ways of thinking" (27).
"Identity and analogy theory typically focus on compatibilities between mental spaces simultaneously connected, but blending is equally driven by incompatibilities" (29).
"Our major claims in this book are radical but true: Nearly all important thinking takes place outside of consciousness and is not available on introspection; the mental feats we think of as the most impressive are trivial compared to everyday capacities; the imagination is always at work in ways that consciousness does not apprehend; consciousness can glimpse only a few vestiges of what the mind is doing; the scientist, the engineer, the mathematician, and the economist, impressive as their knowledge and techniques may be, are also unaware of how they are thinking and, even though they are experts, will not find out just by asking themselves" (34).

Consciousness (Neuroscience)

Antonio Damasio, *The Feeling of What Happens*, 1999
proto-self (basic life regulation)
emotion – includes both primary and secondary/background emotion. Can't be controlled willfully.
feeling -> consciousness and higher order reasoning.

Development

Barbara Rogoff, *Apprenticeship in Thinking*, 1990
guided participation – "I develop the concept of **guided participation** to suggest that both guidance and participation in culturally valued activities are essential to children's apprenticeship in thinking. Guidance may be **tacit** or **explicit**, and participation may vary in the extent to which children or caregivers are responsible for its arrangement" (8).
"My stance is that the individual's efforts and sociocultural arrangements and involvements are inseparable, mutually embedded focuses of interest" (27).
Wells: "Similarly, judgments about the characteristics of a **good narrative vary** across cultures. Abstract **story grammars** differ in format across cultures, and these differences lead to distortions in recall of stories that do not fit the ideal; American groups, by contrast, distrort stories to avoid ending a story on a negative note or with unresolved problems" (57).
intersubjectivity – "a sharing of focus and purpose between children and their more skilled partners and their challenging and exploring peers" (8).

Barbara Rogoff, The Cultural Nature of Human Development, 2003
"Development as Transformation of Participation in Cultural Activities"
Communities of activity; emic – insider's perspective; imposed etic – usually processed from an inappropriate understanding and exerts assumptions about cultural forms; derived etic – informed by emic perspective. "Derived etic understanding is a continually moving target" (31).
"Because I am interested in visual representations as tools for thought, I am seeking other ways to portray the mutual relationship of culture and human development, avoiding the idea that either occurs alone (without the contributions of the other) or that one produces the other" (50). Co-constitutive. Rogoff is exceptionally open about her methods and their limitations.
Transformation-of-participation perspective (includes view of surrounds)
Bronfenbrenner—nested ecological systems
ZPD (50)