

THE TROPES OF JEAN PIAGET

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Most writers of English handbooks present tropes simply as figures of speech used for stylistic adornment. Giambattista Vico, however, viewed tropes differently. Frank D'Angelo summarizes Vico's ideas:

To Vico, the master tropes [metaphor, metonymy, synecdoche, and irony] were the modes of thinking of the primitive consciousness. They constituted for the primitive mind a kind of "poetic logic." The movement of thought represented by the tropes was from the concrete to the abstract. (113-114)

In his explication of metaphor, metonymy, synecdoche, and irony, Kenneth Burke, like Vico, explains these tropes as ways of understanding reality (503-518). Extending the Vico-Burke interpretation of tropes, Hayden White analyzes the cognitive stages of Jean Piaget (which move from the concrete to the abstract) as expressions of the master tropes. According to White, Piaget's first stage, sensorimotor, is metaphorical; Piaget's second stage, representational, is metonymic; Piaget's third stage, operational, is synecdochic; and Piaget's fourth stage, logical, is ironic (7-9; Piaget, *Child* 11-24).¹

While I find White's argument convincing, I also see Piaget's discussion of intellectual development as topological in ways that White does not mention.

Metaphor

By writing about cognitive "mechanisms" (*Child* 40-42; *Six* 4, 6-7, 98) and the "sensorimotor period," Piaget establishes the metaphor of the mind as a machine. Piaget consciously offers an alternative to empiricist models of cognition created by Watson and others. But Piaget's oft-repeated metaphorical phrases tend to undermine his efforts to distinguish his paradigm from empiricist conceptions of the mind as a machine.

More important to Piaget's system, however, is the metaphor that John Trimbur characterizes as "inner/outer." Barry Kroll, who embraces Piaget's general theory, explains Piaget's "conceptual framework" as "the movement from an egocentric to a decentered perspective" (271). J. H. Flavell, a disciple of Piaget, defines egocentrism as a situation in which "the cognizer sees the world from a single point of view only—his own—but without the existence of other viewpoints or perspectives and . . . without the awareness that he is prisoner of his own" (60). Because he views egocentrism as self-contained, Piaget himself regards it as the "main obstacle to the coordination of viewpoints and to cooperation" (qtd. in Trimbur 214). By opening a person's consciousness to include the perspectives of others, decentering overcomes the self-imprisonment of egocentrism and thus makes cognitive development possible. A long and difficult process, decentering lasts well into adolescence before "true socialization" leads the child to abandon egocentrism in favor of a more comprehensive understanding of others' views and of the "external universe" (*Six* 16, 21, 60-64).

Metonymy

According to Phillip Arrington, metonymy separates a complex whole into parts (328). Piaget's career-long habit of dividing cognitive development into many stages and substages,

processes and subprocesses is metonymic in Arrington's sense and also in Burke's sense of fostering "the reduction of some higher or more complex realm of being to the terms of a lower or less complex realm of being" (506). By discriminating between cognitive tasks that no one tries to teach children (such as reaching for an object after an adult has covered it with a blanket) from those that adults do try to teach children (such as reading and arithmetic), Piaget explicitly attempts to distinguish "truly psychological development" from "school development" and "family development" (*Child* 2). He then erects a stage theory of general cognitive development on the foundation of his studies of unsocialized cognition.

One might object to this procedure by questioning whether cognitive stages actually operate with the neatness, elegance, and universality of Piaget's model. Does a "Copernican revolution" occur between the first major stage and the second, as Piaget repeatedly asserts (*Child* 15-16; *Six* 8-9; "Piaget's Theory" 14)? Or are cognitive transitions messier, more incremental, and more context-dependent than Piaget would allow?

One could also inquire about Piaget's notion that "spontaneous [cognitive] development" constitutes "the obvious and necessary condition for the school development" (*Child* 3). If so, does "school development" necessarily follow identical (or similar) stages and substages? That is, does a model of "spontaneous development" explain cognition that is subject to socialization and instruction? Why? One could probe further by wondering whether anyone can really separate "spontaneous development" and "school development." That is, one could ask whether *any* cognition—even that of pre-schoolers—occurs apart from socialization. By shrinking general cognition to a series of stages and substages based on observations of ostensibly unsocialized cognitive tasks, Piaget reduces the complex realm of socialized thought to something more easily described and understood. Such a maneuver is reductively metonymic.

Synecdoche

Arrington maintains that synecdoche resembles metonymy inasmuch as both presuppose "the difference between part and whole" (332). Distinguishing the two tropes, he explains, "But while metonymy turns downward, reduces a whole to its different parts, synecdoche identifies part and whole and elevates the part into the whole" (332).

Piaget begins one of his books by comparing intellectual development to the "organic growth" of a plant or animal (*Six* 3). The equation also appears in an essay by Piaget that introduces another book ("Piaget's Theory" 11-12); an essay by Piaget's follower and editor, David Elkind (vii); and an editor's preface by Piaget's collaborator, Barbel Inhelder. Inhelder declares, ". . . Piaget has always been concerned with problems of the functional adaptation of the organism to its environment." She continues, "Piaget's point of view converges with that of certain modern schools of biology, especially Waddington's with regard to his work on embryogenesis" (3). Underlying this characterization is the synecdochic assumption that an embryonic cognitive stage (or part) contains the final stage (or whole) and that the later whole contains previously dominant parts. The use of this synecdoche in Piagetian theory is perhaps most obvious when Piaget mixes tropes, as he does in an essay that accounts for "the continuity between organic life and cognitive mechanisms" ("Biology" 45).²

Irony

Burke defines irony as a " 'perspective on perspectives' " in which "none of the participating 'sub-perspectives' can be treated as precisely right or precisely wrong" (512). White elaborates by describing irony as "the *dissociation* of thought from its possible objects, a capacity to reflect on reflection itself" (9).

Just as Burke believes that the four master tropes "overlap upon each other" (505), Piaget treats each intellectual phase as, in White's words, "crystallizing, superimposing itself on, and succeeding" an earlier phase (11). Although each of Piaget's cognitive stages signifies a distinct way of comprehending reality, each stage retains in some form the mode of understanding of the previous stage. By explicating cognitive development in such a fashion, Piaget plays with shifts in perspective about reality. Each transition between cognitive stages entails irony because each transition involves the addition of another perspective, no single perspective being always right or always wrong. Piaget's notion of transition as superimposition conforms to Burke's understanding of irony as "the interaction of terms upon one another to produce a *development* which uses all the terms" (512).

Evaluating Piaget

Interest in Piaget at times has focused on the relationships among his tropes. Maurice Merleau-Ponty, for example, uses Piaget's trope of synecdoche to challenge his trope of metonymy. Warning that "one must be wary of all artificial divisions into 'successive stages,'" Merleau-Ponty claims that all cognitive possibilities are "inscribed in the expressive manifestations of the child" and that, therefore, no cognitive possibility the child ever manifests is "absolutely new" (21). Merleau-Ponty contends that, because a child's entire future cognition (the whole) is inscribed in her beginning (the part), the division of development into stages arbitrarily segments a child's process of continuously unfolding cognition. For Merleau-Ponty, Piaget's synecdoche precludes his metonymy. However, Piaget's advocates regard his network of tropes as self-sustaining.

Although the relationship among Piaget's tropes has drawn some attention, most of the debate about Piaget has swirled around a single trope – the "inner/outer" metaphor. Piaget's notions of egocentrism and decentering have appealed not only to psychologists like Elkind and Flavell but also to a number of composition theorists, including Andrea Lunsford ("Cognitive Development"), Linda Flower, Donna Haisty, Kroll, and Loren Barritt and Kroll.³ These scholars wish to apply Piaget's ideas to the classroom by organizing a writing curriculum that fosters the loss of egocentrism through decentering. Such a step, they believe, would lead students away from self-containment and toward a mature awareness of audience.

But others spurn the "inner/outer" metaphor. Seeing the first term of the metaphor as an exaggeration, Margaret Donaldson claims that children are never as egocentric as Piaget believes (55-56). Ann Berthoff echoes Donaldson's complaint (748). Another significant challenge to the first term of Piaget's metaphor comes from Lev Vygotsky, who rejects Piaget's notion of self-imprisoned egocentric speech. In Trimbur's words, "Vygotsky's work suggests that egocentric speech is a critical step in constructing the self from given social relationships, not an obstacle to relationships that needs decentering" (214). Merleau-Ponty, on the other hand, objects to the second term of the metaphor. Concurring with Piaget that egocentric language is self-generated, self-contained, and unsocialized, Merleau-Ponty maintains that adults never wholly achieve – and never should achieve – a decentered perspective because "egocentric language

exists legitimately in the adult and . . . can have value for knowledge" (60). Merleau-Ponty asks, "Do we not find the same egocentric, autistic, syncretic thinking in the adult as soon as his thinking must go beyond the domain of the acquired in order to express new notions?" (60). According to Vygotsky, the "inner" half of the metaphor never exists; according to Merleau-Ponty, it never ceases to exist.⁴

The problem with this entire debate is that its participants (except Trimbur) think they disagree about cognition itself when they actually disagree about Piaget's tropes. In particular, Piaget's proponents and critics fail to regard his theory of egocentrism and decentering for what it is – a metaphorical interpretation of reality that carries more than a whiff of Cartesian, dualistic metaphysics. Piaget's overall scheme is not what it claims to be: an examination of arhetorical cognition made by an impartial, arhetorical observer. Much as scientists before Einstein and Heisenberg believed that they could objectively study natural phenomena, Piaget mistakenly assumes that he can escape from his own cognitive and rhetorical assumptions to study impartially someone else's cognition. Unfortunately, however, neither Piaget nor anyone else can study cognition directly. Why? Because a theorist's own cognitive and rhetorical assumptions inevitably structure what that theorist discovers about other people's cognition. Piaget's tropes – not his supposedly naked observations and impersonal laws of cognition – form his stance toward thought and language.⁵

With regard to Piaget, we should heed Arrington's advice:

We need to read our theoretical works, past and present, always sensitive to their existence as rhetorical acts, whose language is neither value-neutral nor some imperfect representation of an actual, objective 'truth.' We need, in short, to become more conscious of our own tropic acts, of our discourse as discourse. (335)

When we understand the tropological and rhetorical nature of Piaget's cognitive scheme, we can begin to comprehend how it should – or should not – fit into our classrooms. But not before.

Notes

¹Because a baby only understands sameness, White characterizes Piaget's sensorimotor stage as metaphorical (7; see Piaget, *Child* 11-16). Because a year-and-a-half old child experiences "displacements" that make possible "consciousness of contiguity," White regards Piaget's representational stage as metonymic (8; see Piaget, *Child* 16). Because a seven-year old comprehends "objects as parts of wholes or gathers entities together as elements of a totality sharing the same natures," White views Piaget's operational stage as synecdochic (8-9; see Piaget, *Child* 21). Because a twelve-year old develops a "combinatory" capacity that can achieve "a kind of classification of all the classifications or seriation of all seriations" (Piaget, *Child* 24), White considers Piaget's logical stage as ironic: a child can now articulate "a host of alternative, even mutually exclusive or illogical ways" and can "say one thing and mean another" (9). For a different view of metaphor, see Ricoeur 45-70.

²Coleridge employed the synecdoche of growth to characterize the development of a piece of writing; several contemporary composition theorists have also pressed this synecdoche into service (Arrington 331-334).

³With the exception of Flower, these theorists appear to accept Piaget's general scheme of cognitive development. From Piaget's general system, Flower simply extracts his notion of

egocentrism and decentering and applies that conception to writing. She does not discuss Piaget's entire theory.

⁴For other positions taken in the colloquy over the "inner/outer" metaphor and over Piaget in general, see bibliographical essays by Greenberg, Hays, and Lunsford ("Cognitive Studies").

⁵I do not claim that the master tropes are the only rhetorical principles involved in Piaget's thought and discourse. I suspect that one could discover some version of Aristotle's *topoi*, Burke's pentad, Toulmin's layout, Perelman's loci, and other rhetorical systems operating in Piaget's argumentation and in his cognitive scheme.

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TOWARD A DEFINITION OF A WRITING PROGRAM ADMINISTRATOR: EXPANDING ROLES AND EVOLVING RESPONSIBILITIES

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With the development of large freshman composition programs and with the dynamic and rapid changes that are occurring in the field of composition and rhetoric, writing program administrators face a sometimes bewildering array of demands on their time and expertise. English Departments can no longer afford to delegate the task of directing English composition or developing viable writing across the curriculum programs to untried and untrained junior faculty who have little or no interest in the field. Instead, qualified administrators are being trained through doctoral programs in rhetoric, composition, and linguistics (Chapman and Tate 1987) and through extensive work experience with support from professional associations. It seems important then, to overview job-related developments in the area loosely termed writing program administration.

The tasks and responsibilities of a writing program administrator can be broken down into several broad areas such as: student placement and record keeping, course staffing, program accountability, and curriculum development. Any of these areas can provide an administrator with problems, fiscal, theoretical, and practical. Given the fiscal constraints that are always with academic institutions, I will try to focus on theoretical and practical issues that a new administrator might expect to deal with in each of these areas.

Writing Program Administrators Place Students and Keep Records

A writing program administrator is expected to place incoming freshmen students into appropriate writing courses or to