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The Individual and the Social World

Introduction

This issue of the Newsletter has been organized around the theme of "The individual and the social world." As we have done from time to time in the past, we include in the Newsletter two reprinted articles from sources unlikely to be familiar to Newsletter readers, but of special significance to its purposes.

We begin the issue with an article by Michael Holquist about the work of Mikhail Bakhtin, a Russian intellectual who has only begun to have an impact on American intellectual life in recent years. Holquist and his colleague Caryl Emerson (whose article on Bakhtin and Vygotsky is included in this issue) are in no small measure responsible for making the work of this outstanding scholar available to us.

Bakhtin's work on reported speech focuses on the forms of communication where "two points of view, two speech acts converge and clash." Even when words are enclosed in quotation marks, as if speech were being literally reported as the speech of another, the words, Bakhtin insists, "belong not only to the other." Bakhtin develops these ideas to address the general nature of language and meaning. He provides us with a compelling formulation of the mutual constitution of the individual and society through the medium of language. In terms that reverberate strongly in the pages of this Newsletter, Bakhtin says,

In essence, meaning belongs to a word in its position between speakers; that is meaning is realized only in the process of active, responsive understanding.

Holquist provides insight into Bakhtin's biography as he explains Bakhtin's commitment to dialogism as the nature of language. When meaning is seen not as owned but rented, when meaning resides "between speakers," communication can very usefully be understood as "The Politics of Representation." Bakhtin, the practical politician, understood that he could maintain himself as an individual only as part of a collaboration. The particular form of collaboration that Holquist terms "ventriloquation" was a necessary condition for Bakhtin's invention, lest it remain in "the 'absolute future' of still unrealized possibilities." Drawing on Bakhtin's studies of the novel and of Freud as well as the work on reported speech, Holquist argues for a complex relation between individuals and their social origins, a relation characterized by variations and gaps that can be capitalized on for change in the individual and society.

Emerson, in an excerpt from a longer paper, provides a discussion of Vygotsky in relation to Bakhtin. Although they were contemporaries, there are no overt indicators of their having worked together. The similarities that Emerson points out include their commitment to a concrete historical approach and to understanding humans and human development in the light of a progression from inter- to intra-psychic activity. Emerson shows that a provocative parallel exists in the writers' conceptions of language and consciousness. While Vygotsky assumed that individual consciousness is related to the selective appropriation by the individual of the voice of others, Bakhtin specifies the mechanism of this link. Bakhtin holds that the power of dialogue derives from the fact that the voice of others can be argued with. Emerson relates this idea to Vygotsky's zone of proximal development, which Emerson likens to "a dialogue with one's own future."

Three other articles consider particular interactional situations. Whatever we arrive at as the proper characterization of the relationship between the individual and the group, an important medium of its operation for humans is language. We cannot afford the luxury of considering the language system separately from its use on particular occasions; we must understand the whole. As we attempt to identify similarities and differences that let us use situations as empirical evidence, we must almost always consider the nature of the language and the use of it by subjects and experimenters. Very often our data are in the form of speech records, which must be coded with a proper understanding of the language system. If we are to know when to believe ourselves, and if we are to persuade others of the necessity of our position, we must understand the special role of language as the medium of specifically human activity.

Hutchins' article on Trobriand sacred myth relates this special genre of discourse to the everyday life and consciousness of culture members. His use of the term "repressed" might suggest a clash with Bakhtin's work; however, there is convergence. Historicity, ventriloquation, multiple codes and multiple interpretations -- these notions are shared.

Inagaki and Hatano's article provides a view of growth when children's joint activities make available multiple points of view on a common problem. They could be said to be studying the politics of representing ice-making. They point out the importance of

children's differences and the presence of the concrete materials as well as the options available to the adults in the interaction.

French and Nelson's article brings to attention the role of professional dialogue in two ways. First, in references to their earlier study, we are reminded of the importance of the investigator's role in the production of the subject's responses and the impact of this often-hidden part of the interaction on the conclusions we draw about the child subjects. Second, we are reminded of the difficulty and limitations of the media we have available for dialogue with professional colleagues and the importance of keeping the lines of communication open. If we fail, we may find ourselves, unlike Bakhtin, unable to dialogue with our future and, in sad fact, assign it to the absolute future of always unrealized possibilities.

The Politics of Representation*

Michael Holquist

But the social order is a sacred right which serves as a foundation for all others. This right however, does not come from nature. It is therefore based on convention -- The question is to know what these conventions are. . .

Rousseau, *The Social Contract*

We meet under the aegis of the English Institute. As an outsider, I am aware that departments of English have recently demonstrated a quite remarkable openness to non-Anglo-Saxon ideas about the nature of literary study. However, this new cosmopolitanism has not been all-inclusive; it has stretched to Paris, but such places as Prague and Tartu still seem a bit exotic. As someone, then, who comes out of neither an English nor a French background -- and who is yet anxious not to be perceived as coming out of left field -- I would like to make a few preliminary observations about the assumptive world from which I have come here as a visitor.

The one thing we would now all appear to have in common is an overriding interest in the nature of language. But each different national tradition seems to have a different idea as to what that nature might be: the word *language* is in danger of losing its status as a noun as it shades more and more into the category of what Jakobson calls shifters, a word such as a pronoun, that indicates nothing more than position in discourse. From the no doubt slightly skewed perspective of an American Slavist, there would seem to be at least three such positions, three different conceptions of language abroad in the academy today (I begin by excluding a fourth conception -- the one reigning in departments of linguistics -- which is arguably the most outlandish of all).

In departments of literature, the three dominant

ways language has come to be understood may most economically (if not responsibly) be characterized according to how each conceives the ownership of meaning. A first conception, which I shall call *Personalist*, has been associated on the continent with names like Wilhelm Wundt, Karl Vossler, Benedetto Croce, and Edmund Husserl. But, in less evident forms, it has long been regnant in English studies as a more or less unspoken first principle. This view holds that "I own meaning." A close bond is felt between the sense I have of myself as a unique being and the being of my language.

Such a view, with its heavy investment in the personhood of individuals, is deeply implicated in the Western Humanist tradition. As such, it is at the opposite pole from another view of language which has recently come to dominate departments of French and comparative literature, as well as many English departments. This second, or *Deconstructionist* view, holds that "No one owns meaning": the very conception of meaning, to say nothing of persons, invoked in most traditional epistemologies, begins by illicitly assuming a presence whose end Nietzsche really was announcing when he let it be known that God had died in history.

A third conception of language, which I shall call *Dialogism*, is one found increasingly in Slavic departments. Like the second, it has roots in Geneva. By analogy with leftist and rightist Hegelianism, we might say that it is a right-wing Saussurianism, as opposed to Deconstructionist leftism. If the Left has evolved ever increasingly radical implications of *Langue* and text, the Right has continued to mediate the complexities of *Parole* and context. The Slavic view holds that "We own meaning." Or -- as I am reaching more familiar ground, I feel the need to be more precise -- "If we do not own it, we may at least *rent* meaning." If Personalists maintain that the ground of meaning is in the unique individual, and Deconstructivists locate it in the structure of difference itself, this third view holds that meaning is rooted in the social, but the social conceived in a particular way.

The contention here is that meaning comes about *not* as the lonely product of an intention willed by a sovereign or transcendent ego. Nor is meaning ultimately *impossible* to achieve because of the arbitrary play of differences between signs. In the first instance, meaning would give itself as an immediate presence; as such, it would be subject to all the powerful criticisms Deconstructivists have mounted since at least Derrida's 1967 attack on Husserl.¹ In the second instance, such criticisms may (partially) be avoided, or at least robbed of their worst sting, through the deference one pays them in ordering his own discourse. But the price of such tact -- which can be very impressive in its stoic way -- is the perpetual elusiveness of meaning as it fades away in the phantom relay of the signifying chain.

The Personalist view is simultaneously logo- and phono-centric: the assumption is that I can by *speaking* appropriate to my own use the impersonal structure of signs, which is always already there. The breath of my life is the material of words; my voice welds me to language. The second view goes to the opposite extreme: in it, the human voice is conceived merely as another means for registering differences -- one, moreover, not necessarily privileged: it is far less powerful

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than writing.

Russians, Poles and Czechs such as Baudouin de Courtenay, Nikolai Kruszevski, Mikhail Bakhtin, Lev Vygotsky, Sergej Karecvskij, Jan Mukarovsky, and of course, Roman Jakobson himself have sought since at least the early 1920s to avoid both these extremes. They would argue that the apparently mutual contradiction between phonocentrism on the one hand, and grammatology on the other -- the *tertium non datur* of an overconfident monolog, or an excessively ascetic silence -- obscures a third possibility for conceiving language. It is the one that maintains: I can mean what I say, but only *indirectly*, as a second remove, in words I take and give back to the community according to the protocols it establishes. My voice can mean, but only with others: at times in chorus, but at the best of times in a dialogue.

Meaning in this view is made as a product, much as a work of folklore is "made" in societies that strictly hold to their traditions: "A work of folklore comes into existence only at the moment it is accepted by a particular community."² There may be many versions put forth, but only one will be capable of resisting the structural amnesia of the group. Its acceptance by the community is the actual -- if chronologically secondary -- birth of the text: As metaphor for an account of meaning, this process is, of course, extremely crude; but it has at least the virtue of highlighting what is of central importance in East European philosophy of language from Kruszevski up to and including the work of such people as Jury Lotman: that my words will always come already wrapped in contextual layers sedimented by the many intralanguages, various social patois, the sum of which will constitute "the" language of my culture system.

If we were to compare current ideas about language in terms of the semantic space characteristic of each, it might be said that for Personalists it is inner; for Deconstructivists elsewhere; and for East Europeans somewhere in-between: I emphasize "in-between" here not only to suggest meaning's need always to be shared, but to underline as well the degree to which multiplicity and struggle characterize this heteroglot view of language. At the highest level of abstraction, the contest may be conceived as a Manichean struggle. On the one side are ranged those forces that serve to unify and centralize meaning, that conduce to a structuredness that is indispensable if a text is to manifest system. On the opposing side stand tendencies fostering the diversity and randomness needed to keep open paths to the constantly fluctuating contextual world surrounding any utterance. The normative, systemic aspects of language have attracted the attention of most linguists, whether New Grammarians or Structuralists, and until quite recently the same could be said of most students of literature as well. It is this imbalance that the Russians seek to redress by devoting the majority of their considerable energies to studying the centrifugal forces in language, particularly as they are made specific in the various professional, class, generational, period, and other patois that the academic fiction (a necessary fiction) of a unitary national language seeks to contain. "This stratification, diversity and randomness [which Russians call *raznorečie*, or heteroglossia] is not only a static invariant in the life of language, but also what

insures its dynamics. . . . Alongside centripetal forces, the centrifugal impulses of language carry on their ceaseless work. Alongside. . . . centralization and unification the uninterrupted processes of decentralization and disunification go forward."³

Stated in such general terms, the struggle must appear a bloodless clash of abstractions; however, this is far from being the case. This conflict animates every concrete utterance made by any speaking subject: "The utterance not only answers the requirements of its own language, as an individualized embodiment of a speech act, but it answers the requirements of heteroglossia as well--indeed, any particular utterance is an active participant in such speech diversity" -- a fact that determines the linguistic profile and style of the utterance to no less a degree than its inclusion in any normative centralizing system of a unitary language."⁴

The most comprehensive statement of the dialogic exchange between static signs and a constantly fluctuating reality was made in 1929 by Saussure's Russian student (and respectful opponent) Sergej Karcevskij (1888-1955): "the signifier (sound) and the signified (meaning) slide continually on the 'slope of reality.' Each one 'overflows' the member assigned to it by its partner: the signifier seeks to express itself by means other than by its sign. . . it is thanks to the asymmetric dualism of the structure of its signs that a linguistic system can evolve: the 'adequate' position of the sign is continuously displaced through its adaptation to the exigencies of the concrete situation."⁵ Or, as Edward Sapir never tired of repeating, "All systems leak."

Instead of a neo-Platonic gap between *langue's* dream of order and *parole's* necessary deviance, Dialogists propose a continuum between system and performance, the complementarity of both. The common element connecting both levels is the never-ending contest between canonization and heteroglossia, which is fought out at each level. The process is fairly obvious at the highest levels of generalization, if only because there the struggle has served as traditional subject for philology, which has always studied the victory of one language over another, the supplanting of one normative dialect by another -- indeed, the life and death of whole languages. Philology, of course, has emphasized the role of the great centralizing forces as it pursued its utopian quest for a single *Ursprache*, a tendency that finds its comic extreme in August Schelcher's short story *avis akvāsas ka*, "The Sheep and the Horses" (1868), a work written in a totally concocted proto-Indo-European.

It bears repeating that the contest is present as well in individual utterances. It is more difficult to perceive at the most immediate levels because neither traditional linguistics nor stylistics, as it is usually practiced, has provided units of study adequate to the struggle's complexities. The concentration of linguists on such invariant features as grammatical or phonemic markers misses the point because so much of the battle is prosecuted through the interplay of codes, each of which may be socially distinct, but all of which employ the same grammatical and sound system (a point used by Stalin in his 1950 *Pravda* attack on the hapless Nikolai Marr, a linguist who argued language was a phenomenon of ideological superstructure rather than economic base). The attention stylistics has devoted to units such as

whole sentences and paragraphs fails to take into account that the contest may be fought out as a duel of two social codes within a single sentence -- indeed, within a single word.

For this reason, Bakhtin has proposed as a more sensitive stylistic unit of study what he calls hybrid constructions, that is, "an utterance which belongs, by virtue of its grammatical (syntactic) and compositional markers to a single speaker, but which actually contains mixed within it *two* 'languages,' two semantic and axiological belief systems." As an example, he cites a passage from Dickens's *Little Dorritt*: "That illustrious man and great national ornament, Mr. Merdle, continued his shining course. It began to be widely understood that one who had done society the admirable service of *making so much money out of it*, could not be suffered to remain a commoner. A baronetcy was spoken of with confidence; a peerage was frequently mentioned."⁶

In this passage there is first of all the author's fictive solidarity with

The hypocritically ceremonial general opinion [held by most people] of Merdle. All epithets referring to Merdle in the first sentences derive from [such a] general opinion, that is, they are the concealed speech of another. The second sentence -- "it began to be widely understood" etc. -- is kept within the bounds of an emphatically objective style, representing not subjective opinion, but the admission of a . . . completely indisputable fact. [However,] the phrase "who had done society the admirable service" is completely at the level [once again] of common opinion, repeating its official glorification; but the subordinate clause attached to that glorification ("of making so much money out of it") is made up of the author's words (as *if* put into parenthesis) [but actually without any distinguishing punctuation at all]. The last sentence then picks up again at the level of common opinion. [This is] a typical hybrid construction, where the subordinate clause is in an authorial speech that is relatively *direct* [by contrast with] the main clause [which is] in someone else's speech. The main and subordinate clauses are constructed in different semantic and axiological conceptual systems.⁷

Dialogism argues that what in the English comic novel is often written off as mere irony, actually constitutes a paradigm for all utterance: I can appropriate meaning to my purposes only by ventriloquating others.

A first implication of this principle is that as speakers we all participate in the rigors of authorship: we bend language to represent by representing languages. As an illustration of this process, I would like once again to use Bakhtin as an example; this time, the example provided by the relation he himself bears to certain texts he authored. In order to proceed in this way, some historical context will be necessary.

In the year 1929, three important events occurred in Bakhtin's life. The first was publication of his book *Marxism and the Philosophy of Language*; the second was his arrest and subsequent exile to Kazakhstan; the third was publication of another of his books, *Problems of Dostoevsky's Poetics*. Each of these events had its curious twist. The arrest and exile were never officialized: there were never any formal charges brought and no trial. The only procedures involved were lengthy interrogation (which Bakhtin found quite interesting) and a certain amount of uniquely Soviet plea bargaining; that is, should he be sent to certain death in the forced labor camps of the Solovki islands, or merely exiled to a remote area for a fixed period? In the end he got off

with six years exile, but because the whole thing was officially a nonevent, Bakhtin could never officially be rehabilitated. The Dostoevsky book appeared while Bakhtin was already in jail undergoing questioning. It was highly praised when it came out, by, among others, a leading member of the government, Anatoly Lunacharsky, who made strong claims for the work in a long review article. Thus you have a book written by a man who at that very moment was being held in the Lyubyanka prison being advanced as a model by the Soviet minister for education.

Strangest of all, however, are the facts surrounding the other book Bakhtin published that year, *Marxism and the Philosophy of Language*. I wish to dwell on the eccentric textology of this book, but let me first quickly recapitulate its main thesis. My reason for doing so is that I hope to apply some of its own dicta about the nature of representation in general to the specific act of representation constituted by the text itself.

Anticipating George Herbert Mead's and C. Wright Mill's concept of the "generalized other," Bakhtin points out that

the word is always oriented toward an addressee, toward who that addressee might be . . . each person's inner world and thought has its stabilized *social audience* that comprises the environments in which reasons, motives, values and so on are fashioned . . . the word is a two-sided act. It is determined equally by whose word it is and for whom it is meant. As word it is precisely the product of the reciprocal relationship between speaker and listener, addresser and addressee. Each and every word expresses the one relation to the other. I give myself verbal shape from another's point of view, ultimately from the point of view of the community to which I belong. A word is territory *shared* by both addresser and addressee, by the speaker and his interlocutor.⁸

It is this territorial concept of the word which necessitates a politics of representation: How is the territory governed? What legislates the way meaning is parcelled out in any given utterance?

In order to take up these questions, let me return to the peculiarities surrounding the appearance of *Marxism and the Philosophy of Language* in 1929. A first irregularity concerns the fact that the book, although written by Bakhtin, was actually published under the name of his friend Valentin Nikolaevič Volosinov. This is not the only case of plagiarism in reverse to be laid at Bakhtin's door during the 1920s. He published another book (*Freudianism: A Critical Sketch*, 1927) and an article ("Discourse in Life and Discourse in Art," *Zvezda*, no. 6 (1926), pp. 244-67) under Volosinov's name; a book attacking the Formalists under the name of his friend P. N. Medvedev (*The Formal Method in Literature Study*) in 1928, plus an article on Vitalism in a science journal in 1926 under the name of another friend, the eminent biologist I. I. Kanaev.

This is not the place to rehearse the long and complex proofs of Bakhtin's authorship of these books and articles. Suffice it to say that there is no doubt that he is their actual begetter (I do not say "onlie," because in Bakhtin's theory there are no "onlie" begetters). It is germane to our argument, however, to pause for a moment on his reasons for entering into what might be called, in his own terminology, such a *polyphonic* arrangement with his friends. These reasons are complex, and different in the case of each book or article involved, but essentially they all boil down to expedi-

ence: Bakhtin was notorious in Leningrad intellectual circles as a *cerkovnik*, a devout Orthodox Christian (of the unorthodox sort Russian intellectuals become when they give themselves to the Russian Orthodox Church). He was associated with the *Voskresenie* group, which gathered weekly for prayer and discussion. From early on (1918-24) in his career, while still living in Byelorussia, in retreat from the capital, Bakhtin had been working on a magnum opus that he hoped would succeed in doing for the Russian religious tradition what Hermann Cohen had failed to do in his last book, *Religion der Vernunft*, (1918), for Judaism: that is, to completely rethink West European metaphysics in the light of religious thought; to show, as it were, that philosophy had in a sense always been anticipated by religion. The problems metaphysics had not solved within its categories could be shown to avail themselves to theology. This intention took the shape of an enormous book Bakhtin wrote during the early 1920s in the area of moral philosophy.

Only portions of the manuscript have survived, written out in pencil on crumbling student note pads. It bears no title, but internal evidence suggests it might be called *The Architectonics of Responsibility*.⁹ It is a full-blown axiological theory having clear ties with both Neo-Kantianism and Husserlian phenomenology. The theory is couched in its own highly idiosyncratic language, which exploits Russian for its unique coining capacities -- much as Heidegger plays with German and Greek.

We shall not have time to dwell on this work, but in order to proceed it must be kept in mind that *it contains, in embryonic form, every major idea Bakhtin was to have for the rest of his long life*. The whole conception of the work (a kind of phenomenological meditation on Christ's injunction to treat others as you would yourself be treated), to say nothing of its lyrico-metaphysical style, was wildly at odds with the time and place in which Bakhtin lived. He attempted to publish a watered-down version on one section in 1924, but the journal that had been foolhardy enough to accept it was closed down before the fragment could be published. Bakhtin's problem, then, was to find ways he could translate his idiosyncratic religious ideas into a language and a genre that would be publicly acceptable in the Soviet Union at a time when that country had already begun its march into the dark night of the 1930s.

The problem became even more urgent in the latter half of the 1920s, since Bakhtin could find no work. He and his wife lived the most ascetic of lives, existing for long periods on little more than strong tea, and smoking endless, even stronger cigarettes in an effort to keep warm. At this point, the theoretical epicenter of his work -- how to reconcile modern linguistics with the biblical assurance that the Word became flesh -- overlapped with his own most pressing practical needs: How was he to find an appropriate ideological flesh for the spirit of his own words so that he could sell his work before wasting completely away?

His answer was to conceive a number of books, each of which would convey one of another aspect of the general theory of his *Architectonics*, but all of which could be presented in the Marxist idiom of the day. Thus a major thesis of his axiology had been that human existence is the interaction between a given

world that is always already there (*uže stavšee bytie*) and a mind that is conjoined (*priobščēn*) to this world through the deed (*postupok*) of enacting values. What Bakhtin does in *Marxism and the Philosophy of Language*, for instance, is to define the always-already-there aspect of the world as the "socioeconomic base." A central obsession in the axiology had been the relation between the "I" and "the other," an irreducible duality conceived in terms of the need to *share* being. Bakhtin's term for the distinctiveness of human existence is *sobyije bytija*, a pun implying that such existence is both a coexisting (*sobytie*) and an event (*sobytie*). In the Vološinov books, Bakhtin continues to foreground the primacy of shared being, but this time in terms of social existence. In his book on Freud, Bakhtin says "*dialectical materialism* demands that . . . human psychology be socialized."¹⁰ We might add this is not only the demand of "dialectical materialism," but of Bakhtin's own system of ethics as well, in which there is no "I" without "the other."

Marx is sometimes present in the works published in the late twenties as an honored philosopher who very early saw the systematic implications of man's social being. Thus his *Sixth Thesis of Fenerbach* can be quoted with approval: "The essence of man is not an abstraction inherent in each separate individual. In its reality it is the aggregate of social relationship."¹¹ This emphasis on the collective and social dimension in human beings is not, of course, an exclusively Marxist attitude (another area where such a position is an enabling a priori is, obviously, the study of language: Zellig Harris relates that after Leonard Bloomfield read *Capital* in the thirties he "was impressed above all with the similarity between Marx's statement of social behavior and that of linguistics").

Marxist terms are, however, most often present in Bakhtin's books from this period as a kind of *convenient*, in the abstract, not necessarily *inimical* -- but above all, *necessary* -- flag under which to advance his own views: If the Christian word were to take on Soviet flesh it had to clothe itself in ideological disguise.

It would have been impossible, of course, for Bakhtin himself, in the tight circle of the Leningrad intelligentsia, to publish self-dramatizingly Marxist works, even had he wished to; everyone knew of his religious beliefs. Two of his *friends*, however, could publish such works without straining credulity: Vološinov because of his relative obscurity -- he was a minor poet, amateur musicologist, and student of linguists, about whose personal convictions very little was generally known;¹² and Medvedev, because he was not only a Marxist, but a well-known and energetic member of the party, former chairman of the Central Committee in Vitebsk province, and, in Leningrad, a frequent go-between in the party's dealings with people in the theater and other intellectuals. Each of these men had his own reasons for entering the deception: Vološinov, because he wanted to help his beloved friend and mentor; Medvedev, because he felt such a book might raise his stock both in the party and among the ranks of the intelligentsia. So it was that the three books were published as if they were contributions to Marxist theory put forward by committed Soviet Marxists. The parts Vološinov and Medvedev were assigned required both actors to have well-established *empires*.

Did Bakhtin -- as did so many others -- have to completely *misrepresent* his personally held beliefs in order to publish in the unusual conditions obtaining in the Soviet Union? The answer, while it must, of course, be highly qualified, is that he did *not*. The Vološinov and Medvedev books are, among other things, investigations into the mystery of the voice. They probe the surprising complexities that lie hidden in the apparently elementary question, "Who is talking?" When discussing the phenomenon of "reported or indirect speech" (*čužaja reč*; literally the "speech of another"), there is a point in each of the books where Bakhtin leaves an opening in the manifest rhetoric he has woven around his argument. He creates a kind of authorial loophole (*lazejka*), in which he describes exactly what he is doing.

In *Marxism and the Philosophy of Language*, one such loophole is constituted by his discussion of the situation that occurs in fiction when the character and author speak with a *single* voice:

The absolute of acting out we understand to be not only a change of expressive intonation -- a change logically possible within the confines of a single voice, a single consciousness -- but also a change in voice in terms of the whole set of features individualizing that voice, a change of persona ("mask") in terms of a whole set of individualizing traits of facial expression and gesticulation, and finally, the complete self-consistency of this voice and persona throughout the entire acting out of the role.¹³

In other words, the text of *Marxism and the Philosophy of Language* itself constitutes the kind of dialogic space Bakhtin is talking about within it. Bakhtin, as author, manipulates the *persona* of Vološinov, using his Marxist voice to ventriloquate a meaning not specific to Marxism, even when conceived as only a discourse.

The recurring motifs of *Marxism and the Philosophy of Language* -- "the concrete utterance," "the living word," and "the word in the word" -- bespeak in their Marxist context an emphasis on the here and now, on the intensely immediate exchange between living people in actual historical and social encounters. Does not this emphasis on the material world of the present preclude any religious interpretation? Some background is necessary here. Such motifs are present in the Russian religious tradition as well, even the insistence on materialism (Nicolas Zernov has recently pointed out that "the fundamental conviction of the Russian religious mind is the potential holiness of matter").¹⁴

This concern for the materiality of things is nowhere more insistently present in Orthodoxy than in its ancient obsession with the corporeality of Christ, the emptying out of spirit, *kenosis*, when the Word took on flesh during the life of Jesus. From the time of their conversion as a nation, the Russians have venerated Christ not as the Byzantine Pantocrater, but as a humble man, a tradition that continued to live in the twentieth century in the fascination exercised by "God-Manhood," not only on such would-be mystics as Merezkovsky, but even on political radicals such as Gorky, who preached God-building (*bogostroitel'stvo*) from the rostrum of the Writers' Union Congresses as late as the thirties.

There is no time to trace this "kenotic" tradition in any detail, but we should keep in mind that the first Russian saints, Boris and Gleb, were canonized not because they were martyrs for the faith. Their deaths

were cold-bloodedly political; they were assassinated by their brother Sviatopolk and his followers to insure Sviatopolk's inheritance of his father's throne. They submitted humbly and meekly to the knives of their attackers, and it was this humility, this following of Christ's example (Russians shy away from the idea of "imitatio") that served as grounds for their being made saints. G. P. Fedotov, a member of the *Voskresenie* group that Bakhtin frequented, in his history of the Russian religious mind (written after Fedotov's emigration) points out that St. Theodosius, founder of the greatest of the old Russian monasteries, was opposed to any mysticism. In this, he "is the spokesman of ancient Russia. . . . The terms in which he speaks of his love for Christ are quite remarkable: the Eucharistic bread speaks to him not only of Christ, but especially of Christ's flesh."¹⁵

This tradition was kept alive in Russian religious experience throughout the centuries: at times the obsession with Christ's corporeality took extreme forms, such as the sect of the *Khlysty*, an Orthodox version of Tantrism, in which sexual orgies were an inveterate feature (and whose importance in the twentieth century was highlighted in the central role played by Rasputin at the court of the last Romanov czar).

Bakhtin's work in axiology was a philosophical contribution to this tradition. Its basic thesis was that men define their unique place in existence through the responsibility they enact, the care they exhibit in their deeds for others and the world. Deed is understood as meaning *word* as well as physical act: the deed is how meaning comes into the world, how brute facticity is given significance and form, how the Word becomes flesh.

Marxism and the Philosophy of Language; if treated as an utterance -- that is, a statement whose meaning depends on the unrepeatable historical and social context in which it was pronounced, as well as on the repeatable words of the text -- is, then, a very complex example of the transcoding possibilities in indirect speech, *čužaja reč*, the speech of the other: Bakhtin has appropriated the code of one ideology to make public the message of quite another.

One of the more popular accounts of representation imported recently from France has been Pierre Macherey's application of Louis Althusser.¹⁶ It is a highly sophisticated model for mapping the relationship between an individual consciousness and the expressive means a society makes available to such a consciousness. As such, I would like (in passing) to point out why it cannot account for Bakhtin's ideological transcoding. Pierre Macherey still assumes the necessity of bad faith, the inescapability of false consciousness. In this view, authors can never express the actual place they occupy among the reigning myths of their own time and place. It is a Marxist version of "blindness and insight," in which a text is always incomplete insofar as it will always leave out its author's complicity in the web of his own -- unavoidable -- misrecognitions. Thus, Jules Verne might "figure" the ideology of the Third Republic's colonializing bourgeoisie, but a discerning (subsequent) critic will be able to perceive a gap in his texts where, all unknown to the historical subject Jules Verne, he is actually "representing" a powerful critique of that ideology. There are; as it were, two voices, two

ideologies to be found in a single text, but only as it is constituted by the astute reader who can overcome its delusion, the delusion of its author, that it (he) is monologic. Clearly such a theory cannot account for Bakhtin's very consciously wrought creolization of different ideologies in the texts he published as Volosinov. In his case, we get the very opposite of what Macherey proposes: it is precisely the *author* who knew more about the ideologies concealed in the gaps of his text than his "discerning readers" in the office of the Soviet censor.

The theory of representation most capable of accounting for Bakhtin's dialogic practice is, not surprisingly, his own.

In his book on Freud, Bakhtin redefines the distinction between the conscious and the unconscious. This part of the argument is initiated by a bold act of substitution. Bakhtin reformulates the distinction between conscious and unconscious as a difference not between two different kinds of reality, for they are both variants of the same phenomenon: *both* are aspects of consciousness. Instead of positing an ontological difference between the two, Bakhtin perceives the distinction as differing degrees of ideological *sharing*: the unconscious is a suppressed, relatively idiosyncratic ideological realm (insofar as ideology can *ever* be idiosyncratic), whereas the conscious is a public world whose ideologies may be shared openly with others. He calls Freud's *unconscious* the "unofficial conscious," as opposed to the ordinary "official conscious."

The language of unofficial conscious is inner speech, the language of official conscious outward speech, but they both operate according to the general rules of all human verbal behavior. "*The verbal component of behavior is determined in all fundamentals and essentials of its content by objective-social factors. . . . Therefore nothing verbal in human behavior (inner and outward speech equally) can under any circumstances be reckoned to the account of the individual subject in isolation; the verbal is not his property but the property of his social group (his social milieu).*"¹⁷

There is, of course, a *hierarchy* of causes and effects which stretches from the content of the individual psyche (understood as *individual*, but never isolated) to the content of a large-scale system of culture. The route between the two extremes is, however, a highway governed by the same rules of the road: "At all stages of this route human consciousness operates through words."¹⁸ It follows that:

Any human verbal utterance is an ideological construct in the small. The motivation of one's behaviour is *juridical* and *moral* behaviour on a small scale; an exclamation of joy or grief is a primitive lyric composition; pragmatic considerations of the causes and consequences of happenings are germinal forms of *scientific* and *philosophical* cognition. . . . The stable, formulated ideological systems of the sciences, the arts, jurisprudence and the like, have sprung and crystallized from that seething ideological element where broad waves of inner and outward speech engulf our every act and our very perception.¹⁹

But if there are important similarities between the *modus operandi* of individual psyches and whole culture systems, there are also significant differences. In outlining these, we first become aware of the reasons for Bakhtin's substituting unofficiality for Freud's unconscious/conscious distinction.

Although the systems of individual psyche and whole societies are both ideological through and through, ideology has a different status in each. The primary difference consists in the achieved, stable quality of official ideologies that are shared by the group as a whole. They are, in Bakhtin's own terminology, "finished off" (*zaversen*), the source of what he will call, in the thirties' version of the same distinction, the discourse of authority (*avtoritetnoe slovo*). Because of its rigidity, it is always-always-there, it is "pre-located discourse" (*prednaxodinoe slovo*), the language, then of the fathers, a past that is still very present.

Against this fixed system of values, Bakhtin poses another system, which he calls behavioral ideology, "that inner and outward speech that permeates our individual, 'personal' behaviour in all its aspects."²⁰ As opposed to broad-based social values, behavioral ideology is "more sensitive, more responsive, more excitable and livelier" than an ideology that has undergone formulation and become "official." It is *not* finished off, and corresponds to what Bakhtin will call innerly persuasive discourse (*vnutrenno-ubeditel'noe slovo*) in the thirties. It is unfinished, not completely formulated, because it is the world ideologized from the point of view of an individual consciousness who lives in "the absolute future" of still unrealized possibilities.

The opposition Bakhtin sets up here, although carefully camouflaged in Marxist terminology and neutral adjectives (i.e., "social," "behavioral"), is still the master opposition at the heart of his *Architectonics*: the conflict between a set of values grounded in the self, and a set of values grounded in the other. What Bakhtin is saying in his distinction between behavioral ideology and social ideology is that there is a *gap* between the two. Individual consciousness never -- even among the most wholly committed ideologues -- fully replicates the structure of the society's public values. To assume that it *can* is the great mistake of "vulgar Marxists" who seek a one-to-one correspondence between individuals and their social origin, who seek to close the space between individual consciousness and class consciousness.

In his *Architectonics*, Bakhtin had explained the gap in ontological terms; the self and the other were seen to constitute two different realities, which could never fuse on a single plane. In the book on Freud, the explanation for the gap is developmental, that is, behavioral ideology is conceived as still inchoate, a primitive form of more public ideologies: when behavioral thought finds its highest expression, it will be fixed in the *shared* values of an official ideology. The switch to such developmental categories was a perhaps necessary dissembling if so radical a distinction was to be maintained at all. But, even so, the clear implication is that the traffic between the social and the individual is not *all one way*. An ideology, once formulated, has enormous impact on individuals comprising the society whose values it defines. The *opposite* is also the case, however, for "in the depths of behavioral ideology accumulate those contradictions which once having reached a certain threshold, ultimately burst asunder the system of the official ideology."²¹ (This surely is what Erik Erikson has in mind as well when he characterizes the collision between the individual histories of Luther and Gandhi and the collective histories of their societies as the willingness of such men "to do the dirty work of

their ages.")

What Bakhtin has done is to realize, in a recognizably Russian scenario, Freud's metaphor of censorship: the *unconscious*, as unofficial *conscious*, operates like a minority political party opposed to certain aspects of the politics reigning in the surrounding culture. The more of these aspects it opposes, the more "censored" it is, because the difference between its values and those of the majority will be expressed as a difference in the intelligibility of languages; the less the unofficial party has in common with official ideology, the more restricted will be its expressive means. Insofar as the minority cannot *share* its values, it is condemned to a relative silence. It is as if an Eskimo revolutionary group, seeking independence from the United States, were to flood New York City with manifestoes written in Athabaskan -- even though *willing* a conflict with the majority culture, the group is condemned to inaction by the structure of communication, the architectonics of value. In a very real sense, what Bakhtin is doing may be likened to the efforts of early Christians to spread their message by parable and allegory. The clandestine church in Leningrad during these years was called "the catacomb church" because its members felt they lived in times very similar to those first-century sectarians who met by night in cellars below the imperial marble of a hostile Rome.

It is here we should seek the reasons Bakhtin feels compelled to revise Freud's scenario of conflict between the official and unofficial conscious. When he writes that "the wider and deeper the breach between the official and unofficial conscious, the more difficult it becomes for motives of inner speech to turn into outward speech . . . wherein they might acquire formulation, clarity and vigor,"²² he is describing his own dilemma, the increasing gap between his own religious and metaphysical ideas and the Soviet government's ever more militant insistence on adherence to Russian Communism. Bakhtin says that "motives under these conditions begin to . . . lose their verbal countenance, and little by little really do turn into a 'foreign body' in psyche," but it is clear he also means that they become foreign bodies in the state as well.

His daring insistence on the uniplanar coexistence of rules of governance in the *psyche* with rules for governance in the *state* is not merely one more way to conceive Freudian theory. It also explains Bakhtin's practice of sending out transcoded messages from the catacombs. He has just said that the gap between official and unofficial conscious can become so great that finally the content of the unofficial conscious is snuffed out. But if we remember that the traffic between the terminus of an individual psyche and that of a whole culture moves in *both* directions, a more optimistic scenario may be conceived for unofficial forces: it is not true

that every motive in contradiction with the official ideology must degenerate into indistinct inner speech and then die out -- [one of them] might well engage in a struggle with that official ideology [and] . . . if it is not merely the motive of a declassé loner, then it has a chance for a future and perhaps even a *victorious future* . . . at first a motive of this sort will develop within a small social milieu and will depart into the underground -- not the psychological underground, but the salutary political underground.²³

For Russians, utterance has ever been a contest, a struggle. The need to speak indirectly has resulted in a Russian discourse that is always fabular precisely when it is fueled by the most intense desire to mean. Such indirection has resulted in an allegorical mode known as "Aesopic language." Bakhtin's achievement is to refine, out of the particular features that have created such a situation, a synthetic philosophy of language.

If he is correct, utterance cannot avoid contest and struggle. The dictum that "War is the prosecution of diplomacy by other means" may in Bakhtin's case be paraphrased as "Allegory is the prosecution of semantic intention by other means". As such, Bakhtin's example provides at least the beginning of an answer to some troubling questions raised recently by Paul de Man in his reading of Pascal: "From a theoretical point of view," de Man writes, "there ought to be no difficulty in moving from epistemology to persuasion. The very occurrence of allegory, however, indicates a possible complication. Why is it that the furthest reaching truths about ourselves and the world have to be stated in such a lopsided, referentially indirect mode?"

The answer provided by Bakhtin in both his theory and his practice, although not adequate to all the implications of de Man's question, suffices at least to point us in a further direction. If we begin by assuming that *all* representation must be indirect, that *all* utterance is ventriloquism, then it will be clear -- even, or especially, from a theoretical point of view -- that difficulties *do* exist in moving from epistemology to persuasion. This is because difficulties exist in the very politics of any utterance, difficulties that at their most powerful exist in the politics of culture systems.

If the actual source of prohibition is recognized, however, the possibility of deceiving the censor becomes an option. I would like now, very briefly, to return to the three views of language with which I began. Such a tripartite division is, of course, already overschematized. I hope, however, such categorization will take any further strain put upon it by suggesting that each view of language results in its own characteristic genre. Personalism has a natural affinity with the *Bildungsroman*; it is full of "Great Expectations." Deconstructivism has an affinity with lyric and fragment; it concerns itself with traces such as the message that never gets delivered in Kafka's fragment, "The News of the Building of the Wall."

Dialogism has a taste for carnival and comedy, an affinity perhaps best caught in Bakhtin's lifelong affection for the first story of the *Decameron*, "How Ser Ciapelletto Became Saint Ciapelletto." You will remember it is a funny -- but somewhat eerie -- tale about an evil merchant who has lied, cheated, and indiscriminately fornicated all his life. He falls ill and recognizes that he is about to die while visiting a strange town where no one knows him. He calls for a priest in order to make his final confession and, by a series of subtle indirections, convinces the priest he has led a life of the most unexampled virtue. After the evil merchant's death, the priest to whom he confessed tells everyone about his discovery of a secret saint. Soon pilgrimages are made to the merchant's tomb, and, before very long, miracles begin to occur on the site.

In conclusion, I would like to suggest that this tale of how subversive intentions get canonized is not only a

parabolic expression of Bakhtin's biographical project. It serves as well to remind us that although the politics of representation are vexed, it is still a politics insofar as it is an art of the possible. Paraphrasing Stephen Daedalus, we may say that silence is not mandatory, exile may be overcome, as long as cunning reigns.

NOTES

1. Jacques Derrida, *La Voix et le phénomène* (Paris: Presses universitaires de France), 1967. Translated by David Allison, as *Speech and Phenomena* (Evanston, Ill.: Northwestern University Press, 1973).
2. Roman Jakobson (with P. Bogatyrev), "Die Folklore als eine besondere Form des Schaffens," *Selected Writings* (The Hague: Mouton, 1966), 4:13.
3. M.M. Bakhtin, "Slovo v romane," *Voprosy literatury i estetiki* (Moscow: Xudozhevstvennaja literatura, 1975), p. 85. The essay here quoted, "Discourse in the Novel," together with three other pieces on theory of the novel and philosophy of language, will be published in English translation in 1981.
4. *Ibid.*
5. Sergej Karcevskij, "Du dualisme asymétrique de signe linguistique," *Travaux du Cercle linguistique de Prague* (Prague, 1929), 1:88. See also Wendy Steiner's fine piece comparing Saussure and Karcevskij "Language as Process: Sergej Karcevskij's Semiotics of Language," *Sound, Sign and Meaning: Quinquagenary of the Prague Linguistic Circle*, ed. L. Matejka (Ann Arbor: University of Michigan Press, 1978).
6. Bakhtin, "Slovo v romane," p. 119.
7. *Ibid.*, p. 120.
8. M. M. Bakhtin, *Marxism and the Philosophy of Language*, trans. Ladislav Matejka and I. R. Titunik (New York: Seminar Press, 1973), pp. 85-86.
9. A longish portion of this work (one of five sections) was published under the calculatedly neutral title of "Author and Hero," in the latest collection of Bakhtin's writings to be published in the Soviet Union. See "Avtor i geroj," *Estetika slovesnogo tvorčestva*, ed. S. Bočarov (Moscow: Isskustvo, 1979), pp. 7-180.
10. M. M. Bakhtin, *Freudianism, a Marxist Critique* (the translator has changed the original title which was *Marxism: A Critical Sketch*), trans. I. R. Titunik (New York: Academic Press, 1976), p. 22.
11. *Ibid.*, p. 5.
12. There has been a good deal of confusion surrounding Vološinov, due to a rumor that has several times found its way into print in the West. The assumption that Vološinov was arrested in the purges of the 1930s is, however, utterly unfounded. Unlike Bakhtin or Medvedev, Vološinov was never even arrested. He died of tuberculosis in 1936.
13. Bakhtin, *Marxism and the Philosophy of Language*, pp. 156-57.
14. Nicholas Zernov, *The Russian Religious Renaissance of the Twentieth Century* (London: Duckworth, 1963), p. 285.
15. G. P. Fedotov, *The Russian Religious Mind* (Cambridge: Harvard University Press, 1966), 2:317.
16. Pierre Macherey, *A Theory of Literary Production*, trans. Geoffrey Wall (London: Routledge & Kegan Paul, 1978).
17. Bakhtin, *Freudianism*, p. 86.
18. *Ibid.*, p. 87.
19. *Ibid.*, p. 88.
20. *Ibid.*
21. *Ibid.*
22. Bakhtin, *Freudianism*, p. 89.
23. *Ibid.*, p. 90.

Bakhtin and Vygotsky on Internalization of Language*

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In the vigorous intellectual climate of the Soviet Union in the 1920s, both Saussure and Freud attracted much attention and were heatedly debated. Saussure's dichotomy between *langue* and *parole*, and Freud's reliance on language to reveal an "unconscious," posed a challenge to Russian literary scholars, philosophers of language and developmental psychologists -- especially those interested in language acquisition. These men and women worked with the terminology of their time, an experimental and openended Marxism that stressed process, change, and the interaction between organism and environment. They were concerned to ground the psyche in social factors, and, in contrast to Saussure and Freud, to explain the integration of individual with society via language in a less arbitrary, more benevolent way.

An eloquent contribution to the debate was made by Mikhail Bakhtin, in two books appearing under Valentin Voloshinov's name: *Freudianism: A Critical Sketch* (1927) and *Marxism and the Philosophy of Language* (1929).¹ In those two books, Bakhtin develops his own concept of the sign and of the psyche. The sign, he claims, originates in external experience and is organized socially; it arises on inter-individual territory as a concrete historical "event." The psyche, like every human structure, is a social entity filled with ideological signs, a product of continual interaction between it and the outer world. The implications of this for theories of language acquisition and consciousness are indeed radical. Social intercourse, embodied in our outer speech, is gradually internalized to become "inner speech," and this becomes the semiotic material of consciousness (M&PL, 14). The very act of introspection, Bakhtin claims, is modeled on external social discourse; all of our experiences exist "encoded in inner speech" (M&PL, 118). In such a model for perceiving and assimilating reality, an "unconscious" could not really exist. That part of ourselves outside our control and awareness is simply the portion of the conscious not yet fully articulate. According to Bakhtin, Freud's projection of autonomous drives and non-negotiable demands is mere "psychologization of the somatic" -- and, what is more, makes use of language, a thoroughly social and subjective vehicle, to search out supposedly asocial realities of the individual organism.

Bakhtin's model had to account for the phenomena Freud has observed, but do it differently. An alternative system of explanation would have to provide, through experimental work and clinical documentation, specific answers to the key psychological question: how precisely does environment impress a personality, how do outer words become inner speech? One remarkable

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scholar committed to this project was Bakhtin's contemporary, Lev Vygotsky -- a man comparable to Bakhtin in productivity and inter-disciplinary brilliance. Vygotsky's final work, *Thought and Language* (1934),² supplemented by his essays of the 1930s,³ can be read as an important predecessor and perhaps even as clinical underpinning to Bakhtin's philosophy of language. Soviet scholars such as Vyacheslav Ivanov have made this connection explicitly in discussions of Bakhtin's contribution to semiotics.⁴

It must be said at the outset that this "interaction" between Bakhtin and Vygotsky is somewhat hypothetical, although none the less intriguing for that. There is no direct evidence that Bakhtin and Vygotsky ever met, and Vygotsky makes no reference to Bakhtin in his work.⁵ Interest in dialogic relations and the social context of speech was rather widespread in the 1920s, of course; both men doubtless pulled upon and were pulled by many of the same social and scholarly currents. Where Bakhtin and Vygotsky intersect is not on the plane of their actual texts, that is, not in the reality of a cross-reference, but in the ultimate implications of their thought. It is this projected intersection that I will discuss here.

Vygotsky's initial inquiry was very similar to that of Bakhtin's. Could not the unsatisfactory stalemate between idealist and behaviorist psychology -- be resolved with a dynamic synthesis focussing on the concrete speech act itself? At both those extremes the loser had been time. Time, Vygotsky argues, had long been misunderstood and misapplied in the psychological sciences. The development of the child had once been described in terms of botanical models (maturation, "kindergarten"), and then in terms of zoological models (the performance of animals under laboratory conditions), but in Vygotsky's view it is precisely what cannot be learned from plants and lower animals, namely the uniquely-human assimilation and production of language, that psychologists should examine.⁶ Language is man's greatest tool, and so it should be seen precisely as a tool, that is, as a means for communicating with and extracting from the outside world. So viewed, language offers special problems to the psychologist. For if language is always a means of interaction with the world, it is perilous to study it in isolated environments or in traditional "controlled experiments." Vygotsky replaced those conventional locales of science with much looser "task situations," which involved the confrontation of subjects with real problems in a real social setting.⁷ Vygotsky's distrust of the classic psychological experiment (what he derisively called the "stimulus-response framework") should in fact recall Bakhtin's distrust of the classic linguistic model, with its ideal speaker and ideal (or non-existent) listener. Both were suspicious of modelling, for both insisted that only the concrete historical event could validate a human communication or lead to an act of learning.

Vygotsky created for himself a powerful clinical tool out of two convictions: that psychological events must be studied in history, and that external society is the starting-point of consciousness. The two are closely allied, for whatever we can perceive in outer reality we can change, or try to change, through time. In ingenious experiments, Vygotsky extended (and then modified or rejected) the language-learning maps

offered by Piaget, Stern, and Freud. His primary target was Piaget's "egocentric thought," a stage Piaget claimed was intermediate between autistic play and directed (that is, reality-oriented) thought. Piaget had assumed that a child's thought was originally autistic and became realistic only under social pressure; visible here is the direct impress of Freud's pleasure and reality principles. Vygotsky was unsympathetic to the idea that an individual is reluctant to adjust to its environment, that reality, work, and social intercourse are somehow not "pleasurable." In order to test the opposite assumption, Vygotsky conducted the experiments described in *Thought and Language* -- and created his own scenario for language acquisition.

According to this scenario, the child's first efforts at perception result in an isolation of word means -- but "meanings" only in the sense of verbal stimuli, which function in context as signals rather than as proper signs.⁸ A child cannot translate much of the speech he hears into his rudimentary signal systems, because the ability to generalize comes slowly. Until the age of two years, language serves the human child as a 32-"word" vocabulary serves the chimpanzee throughout its life: words, or better vocalizations, are purely emotional, they coincide with gestures but exclude any simultaneous intellectual activity. The child passes out of this chimpanzoid stage when he begins to ask for the names of objects, and at this point there occurs one of the critical moments in human maturation: "thought becomes verbal, and speech [becomes] rational" (T&L, 44). Vygotsky could not define the precise mechanism linking overt to inner speech, but he assumed -- and this, of course, is the crucial point -- that this process followed the same course as obeyed the same laws as other operations involving signs. External experiments could be devised to monitor and refine the seepage between levels. To this end, Vygotsky isolated four stages of "internalization": the natural or preintellectual stage, the stage of naive psychology, the stage of egocentric speech, and the so-called "ingrowth stage." The third stage, egocentric speech, was the most conducive to analysis in task situations. Uncomfortable with Piaget's conclusion that this speech is fantasy-talk and generated asocially, Vygotsky ran a series of experiments designed to socialize and complicate the child's environment at precisely the age when he "talked to himself." He demonstrated that a child talks twice as much when presented with obstacles (T&L, 16-17) and that this externalized "conversation with oneself," commenting on and predicting the results of an action, is in fact the natural dynamic of problem-solving.⁹ Furthermore, this talk turned out to be extremely sensitive to social factors. Piaget had observed similar phenomena; that egocentric speech occurs only in a social context, that the child assumes he is being understood by others, and that such speech is not whispered or abbreviated but spoken as an "utterance," that is, as public speech in a specific environment. Vygotsky accepted this data, but then devised experiments to detach it from Piaget's conclusion. When Vygotsky varied the social factors -- by isolating the child, placing his with deaf-mutes, putting him to play in a room filled with deafening music -- it was found that egocentric speech dropped drastically, to one-fifth its previous rate (T&L, 136-137). Vygotsky concluded that egocentric speech was not, as Piaget had

suggested, a compromise between primary autism and reluctant socialization, but rather the direct outgrowth (or better, ingrowth) of speech which had been from the start socially and environmentally oriented. Piaget was correct when he observed that private and socialized speech did indeed intersect at this stage. But development was proceeding not along the lines of Piaget's scenario, but in the opposite direction. The child was not externalizing his internal thoughts, but internalizing his external verbal interactions. That was why egocentric speech is relatively accessible in three-year-olds, but quite inscrutable in seven-year-olds: the older the child, the more thoroughly has his thought become inner speech (T&L, 134). "Development in thinking," Vygotsky concludes, "is not from the individual to the socialized, but from the social to the individual" (T&L, 20).

Like Bakhtin, Vygotsky offers us a restructuring of the Saussurean dichotomy. In Vygotsky's model of language acquisition, a child's first speech is social: words evoke specific responses and must be reinforced by adults. Only gradually does language assume the role of a "second signal system," that is, become for the child an indirect way of affecting his environment. When it does, his speech differentiates into two separate though interlocking systems: one continues to adjust to the external world and emerges as adult social speech, the other system begins to "internalize" and becomes by degrees a personal language, greatly abbreviative and predicative.¹⁰ In this inner speech, the *sense* of a word -- a "dynamic, fluid, complex whole," takes predominance over a word's *meaning*.¹¹

When internalization begins, egocentric speech drops off. The child becomes, as it were, his own best interlocutor. Crucial to this process, however, is the presence of a challenging verbal and physical environment. The descriptive "monologue" of which egocentric speech is composed can be internalized creatively only if questioned and challenged by outside voices. In this way alone is intelligence possible, intelligence defined not as an accumulation of already-mastered skills, but as a dialogue with one's own future and an address to the external world. It should come as no surprise that Vygotsky was unsympathetic to the standard intelligence test, which measured (in a competitive and isolated context) prior achievement, and punished children for "cheating." A true test of intelligence, Vygotsky argued, was one that posited problems beyond the capacity of the child to solve, and then made help available. How a child seeks help, how he utilizes his environment, how he asks questions of others -- all these constitute the child's "zone of proximal development," where all true learning occurs. Intelligence is a *social* category.¹²

Speech and behavior interact dynamically in a child's development. First speech accompanies action, then precedes it, finally displaces it -- that is, speech assumes the planning function so essential for the higher mental processes.¹³ Just as children outgrow the need to count on their fingers or memorize by means of mnemonic devices, so do they outgrow the need to vocalize their activities. This final stage of speech development, the "ingrowth stage," coincides with the appearance of logical memory, hypothesis-formation, and other mature mental processes.

Vygotsky does not, however, claim a one-to-one fit

between thought and speech. There is speech without thought, as in chimpanzees and infants: there is also thought without speech. Where the two areas overlap is "verbal thought," and this is coincident with language (T&L, 47-48). Since we can share only what we articulate and communicate, it is this linguistic dimension alone that has historical validity.

For Vygotsky, the Word is a powerful amalgam: part sign, part tool, it is *the* significant humanizing event.¹⁴ One makes a self through the words one has learned, fashions one's own voice and inner speech by a selective appropriation of the voices of others. It would obviously be of great interest to know how this process of self-fashioning takes place. Here we can turn to Bakhtin, to an essay dating from the 1930s and thus contemporary with Vygotsky's last writings.¹⁵ In this essay Bakhtin mentions two ways of assimilating the words of others. Each plays its part in shaping the process of inner speech, and each has a ready analogue in the schoolchildren are asked to learn texts. One may be asked to "recite by heart" or to "retell it in one's own words." In *reciting*, the language of others is authoritative it is distanced, taboo, and there can be no play with the framing context. One cannot even entertain the possibility of doubting it, and so one cannot enter into dialogue with it. To change a word in a recitation is to make a mistake. The power of this kind of language, however, has its corresponding cost: once discredited, it becomes a relic, a dead thing. *Retelling in one's own words*, on the other hand, is a more flexible and responsive process. It is the only way we can *originate* anything verbally. In retelling, Bakhtin argues, one arrives at "internally persuasive" discourse -- which, in his view, is as close as anything can come to being totally our own. The struggle within us between these two modes of discourse, the authoritative and the internally persuasive, is what we recognize as intellectual and moral growth.

Both Bakhtin and Vygotsky, as we have seen, responded directly or indirectly to the challenge of Freud. Both attempted to account for their data without resorting to an unconscious in the Freudian sense. Both also replaced isolated, autonomous drives or reflexes with thoroughly social, purposeful language-mediated activity. That is their ground for consciousness. Bakhtin would of course admit that consciousness is not without its pain, and that our activity in this world is often at odds with others. But "the strife, the chaos, the adversity of our psychical life" (Fr, 75) is defined by Bakhtin as conflicts of motives *within* the conscious sphere (albeit an expanded conscious sphere), and thus retains for the Word an objective role in a historically-concrete context. He does not deny the reality of internal conflicts, but he does socialize them, thus exposing their mechanisms to the light of day. If enough individuals experience the same gap, it is re-socialized: one has a political underground, and the potential for revolution (Fr, 89-90).

Thus we see that alienation, if it is to survive at all, must be externalized -- at which point it can become the basis for collective rebellion, or for a new dynamic community. One can never, it seems, be existentially alone. In fact, the very concept of solitude is a fiction -- or rather a paradox. When in 1961 Bakhtin returned to his 1929 study of Dostoevsky (then scheduled for republi-

cation), he jotted down an eloquent series of thoughts on this question of solitude:

No Nirvana is possible for a *single* consciousness. A single consciousness is a contradiction in terms. Consciousness is essentially multiple. . . . I am conscious of myself and become myself only while revealing myself for another, through another and with the help of another.

Separation, dissociation and enclosure within the self as the main reason for the loss of one's self. Not that which takes place within, but that which takes place on the *boundary* between one's one and someone else's consciousness, on the *threshold*. . . . Thus does Dostoevsky confront all decadent and idealistic (individualistic) culture, the culture of essential and inescapable solitude. He asserts the impossibility of solitude, the illusory nature of solitude. The very being of man (both external and internal) is the *deepest communion*. To be means *to communicate*. . . . To be means to be for another, and through the other, for oneself.¹⁶

This passage is in part the product of that deep mediation on Christianity that occupied Bakhtin all his life.¹⁷ But it is also an integral part of his philosophy of language. In a world beset with the existential image of no exit, this insistence on community, on true socialism, gives the Bakhtin Circle an aura of almost old-fashioned coziness in an insecure age.¹⁸

In the Russian model inner speech is thus a benevolent quantity, a "unique form of collaboration with oneself."¹⁹ In the Freudian model, language itself is perceived as neutral, objectified -- a presumption Bakhtin would never make -- and it can therefore be marshalled into service to express the inexpressible. For Bakhtin and Vygotsky, there is, in essence, no "inexpressible." In Freud's world, therefore, the Word is a tool of psychoanalysis. For Bakhtin and Vygotsky, it is a tool of pedagogy.

NOTES

1. V. N. Vološinov, *Freudianism: A Marxist Critique*, translated I. R. Titunik (New York: Academic Press, 1970), hereafter *Fr*. The title has been translated in an unnecessarily misleading way: the Russian is simply *Frejdzizm: kritičeskii očerok* (Freudianism: A critical sketch).

V. N. Vološinov, *Marxism and the Philosophy of Language*, translated Ladislav Matejka and I. R. Titunik (New York: Seminar Press, 1973), hereafter *M&PL*.

Vološinov's authorship of these two texts is disputed. In the text of this article I refer to Bakhtin as the author of both, persuaded by the case and documentation provided by Michael Holquist and Katerina Clark.

2. Lev Vygotsky, *Thought and Language*, trans. Eugenia Hanfmann and Gertrude Vaker (Cambridge, Mass.: MIT Press, 1962), hereafter *T&L*. A more precise translation of the work's title [*Myšlenie i reč'*] would be *Thinking and Speech*: the thinking is specifically a process and not a product, and the language is *uttered*.

3. An edited selection of these pieces has been published in English, with two excellent explanatory essays, as L.S. Vygotsky, *Mind in Society: The Development of Higher Psychological Processes*, ed. Michael Cole, Vera John-Steiner, Sylvia Scribner and Ellen Souberman (Cambridge, Mass.: Harvard University Press, 1978).

4. See Vyacheslav Vs. Ivanov, "The Significance of M.M. Bakhtin's Ideas on Sign, Utterance, and Dialogue for Modern Semiotics," in Baran, pp. 310-325. It should be pointed out, however, that Ivanov makes very wide claims for Bakhtin's

influence; in certain of his cases parallel development would be a more reasonable hypothesis.

5. For this information I am grateful to James V. Wertsch of Chicago's Center for Psychosocial Studies, who read this manuscript and made a number of very astute and helpful suggestions. It is his conviction that Vygotsky's ideas about dialogue are less influenced by Bakhtin than by the Formalist linguist Lev Yakubinsky, whose 1923 essay on "On Dialogic Speech" Vygotsky does cite [see L.P. Iakubinskij, "O dialogičeskoj reči," in L.V. Šerba, ed., *Russkaja reč'* (Petrograd, 1923)]. For a comprehensive discussion of the Vygotsky-Yakubinsky connection, see James Wertsch's forthcoming study, *Cognitive Developmental Theory: A Vygotskian Approach* (Harvard University Press), chapter 4 ("The Semiotic Mediation of Human Activity"). I thank its author for generously sharing with me a draft of this chapter.

6. L. S. Vygotsky, "Tool and Symbol in Child Development," in *Mind in Society*, pp. 19-20.

7. L. S. Vygotsky, "Problems of Method," in *Mind in Society*, pp. 58-69.

8. "Signals" and "signal systems" are basic concepts in the Russian school of psychology. The school traces its fundamental assumptions and terminology to Pavlov, and in particular to two physiological laws which were worked out for lower animals and then extended to man. The first law provides that all learning is conditional [*uslovnyj*, usually mistranslated into English as "conditioned," as in the phrase "uslovnyj refleks"). In a human context, this means that learning is basically not intuitive but environmental. The second law posits a "second signal system," a derivation and extension of classical conditioning. According to Pavlov, speech introduces a new principle into nervous activity: the ability to abstract and generalize signals from the environment. Whereas animals develop at most a "primary signal system" that links concrete stimuli and visual relationships, speech provides man with a second level of links by which we inhibit direct impulses and project ourselves in time and space. Through language, man knows time. We can control the strength of stimuli on our senses, and thereby modify the rule of force by which all organisms are bound. Thus man assumes conscious control over his behavior when the word becomes, in Pavlov's terms, a "signal of signals." For a helpful discussion, see A. R. Luria, *The Role of Speech in the Regulation of Normal and Abnormal Behavior* (New York: Liveright, 1961), pp. 20-42. See also Stephen Toulmin's summary in his excellent review of Vygotsky's work: "The Mozart of Psychology," *The New York Review of Books* (September 28, 1978): 51-57.

The distinction between sign and signal is not, of course, exclusively Pavlovian. Vygotsky also incorporated the Husserlian distinction between *meaning* and *objective reference* (the latter term Vygotsky rendered as "the indicatory function of speech"). Although these categories are similar to Peirce's symbolic sign and indexical sign, there is no evidence that Vygotsky got them from Peirce. I am grateful to James Wertsch for bringing the above to my attention.

9. "Tool and Symbol," pp. 24-26. Vygotsky proceeds to enumerate the advantages of the speaking child over the ape in the area of problem-solving: the speaking child is more independent of his immediate field of vision, more capable of planning, and has greater control over his actions. Speaking children "acquire the capacity to be both the subjects and objects of their own behavior" (p. 26).

10. See "Tool and Symbol," pp. 27-28.

11. See *Thought and Language*, p. 46: "The sense of a word. . . is the sum of all the psychological events aroused in our cons-

ciousness by the word. . . Meaning is only one of the zones of sense, the most stable and precise zone. A word acquires its sense from the context in which it appears; in different contexts, it changes its sense. Meaning remains stable throughout the changes of sense. The dictionary meaning of a word is no more than a stone in the edifice of sense, no more than a potentiality that finds diversified realization in speech."

12. See *Thought and Language*, p. 103, and "Interaction between Learning and Development," in *Mind in Society*, pp. 84-86. The American educator John Holt seems to have something similar in mind when he writes, with wonderful simplicity: "The true test of intelligence is not how much we know how to do, but how we behave when we don't know what to do" [John Holt, *How Children Fail* (New York: Deli, 1964), p. 205].

13. See "Tool and Symbol," pp. 27-28.

14. Vygotsky's distinction between "tool" and "symbol" has a parallel in the bifurcating functions of speech. Both tool and symbol involve mediated activity, but tools are externally oriented, aide to mastering nature, whereas signs are internally oriented, ultimately aide to mastering oneself. See "Internalization of Higher Psychological Functions," in *Mind in Society*, p. 55.

15. "Discourse in the Novel," in M. M. Bakhtin, *The Dialogic Imagination: Four Essays by M. M. Bakhtin*, Ed., Michael Holquist, translation Caryl Emerson and Michael Holquist (Austin: University of Texas Press, 1981) pp. 341-2.

16. M. M. Bakhtin, "K pererabotke knigi o Dostoevskom" [Toward a Reworking of the Dostoevsky Book], in *Eстетика slovesnogo tvorčestva*, pp. 308-27. The passages translated here, in somewhat altered order, appear on pp. 311-13.

The complete text of these 1961 notes for the Dostoevsky book is included as an Appendix in my forthcoming translation of Mikhail Bakhtin, *Problems of Dostoevsky's Poetics* (University of Minnesota Press, 1983).

17. In Leningrad of the 1920's, Bakhtin was well known as a *cerkovnik*, a devout Orthodox Christian; it was for his connections with the underground church that he was arrested in 1929. During these years he wrote a huge metaphysical work -- only portions of which survive -- on the meaning of Christian "responsibility," on "the Word become flesh," and on the implications of the Biblical injunction, "In the Beginning was the Word." On this and other points of biography and doctrine I am indebted to Katerina Clark and Michael Holquist, who have generously shared draft chapters of their forthcoming *Life and Works of Mikhail Bakhtin*. Until that definitive volume appears, see Michael Holquist, "The Politics of Representation," in *Allegory and Representation: Selected Papers from the English Institute, 1979-80*, New Series, no. 5, ed. Stephen J. Greenblatt (Baltimore: The John Hopkins Press, 1981), pp. 163-183. (editors note: The above mentioned article is also reprinted in this issue).

18. For an American echo of the voices of Bakhtin and Vygotsky, see Stephen Toulmin, "The Inwardness of Mental Life," *Critical Inquiry*, Vol. 6, No. 1 (Autumn 1979): 1-16. Very much in their spirit, Toulmin argues that "inner" and "outer" are not on either side of a Great Divide, and that "the moral and emotional ambiguities of our inner lives are simply the moral and emotional ambiguities of our open lives *internalized*" [p. 9].

19. Vygotsky as quoted by V. V. Ivanov, in Baran, p. 326.

Collective Scientific Discovery by Young Children*

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This paper presents a conceptual model of the processes through which children acquire knowledge in interaction with peers in daily life situations.

It is well known that social interaction plays an important role in the acquisition of knowledge of the physical world. There are two distinguishable types of social interaction. One is vertical, represented by adult-child interaction, and the other is horizontal, as in peer interaction. Vygotsky (1978) emphasized the importance of vertical interaction. He pointed out that a child could do more than what he/she could do alone "under adult guidance or in collaboration with more capable peers" (p. 87). His model originally concerned the levels of performance and/or problem-solving strategies on intelligence test items. However, if we regard the acquisition of knowledge as a sort of "open problem-solving," this model can be directly applied, with the depth of acquired knowledge replacing the level of performance. This applied model of knowledge acquisition through vertical interaction does not necessarily emphasize the role of direct instruction by a teacher, as it is often interpreted in connection with Vygotsky's discussion on "scientific concepts" (as against "spontaneous concepts"). Such an interpretation is too narrow for his general concept of "from interpersonal to intrapersonal." Rather, his assertion should be interpreted as suggesting that the development proceeds through the following processes: Initially, an individual can take care of a part of the problem to be solved, and then gradually comes to take on responsibility for the whole by himself/herself. In these processes it is the more capable member of the society who takes charge of those parts which the beginner cannot handle. The Vygotskian model seems to have assumed that one member (i.e., the developed person) continues to be more capable than the other (the developing individual) at every moment in all the phases of problem solving. Considering that even adults can sometimes be helped by, and learn from, children in interaction, it is not reasonable to assume that the more capable member is fixed throughout problem-solving processes. We need a more dynamic process model that can take into account the idea that the more capable member can change from moment to moment in the processes of problem solving (or knowledge acquisition). We will describe this point in more detail below.

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We would like to thank Ms. M. Motoyoshi for permitting us to quote her "A Case of Making Ice" and for giving a prompt and kind response to our further inquiries about the case. We also thank Mr. J. Yohay for editing and proofreading the manuscript.

In contrast to Vygotsky, Piaget claimed that the horizontal interaction was important in the acquisition of knowledge in educational settings (Piaget, 1969; Duckworth, 1964). He did not specify the processes of knowledge acquisition in this interaction nor the nature of the knowledge that is thus acquired. Piaget himself was primarily interested in demonstrating that the structure of intellectual operations were identical to the structures underlying social interactions (Piaget, 1963). However, recent Piaget-inspired studies have demonstrated that knowledge can be acquired through peer interactions (e.g., Murray, 1972; Miller & Brownell, 1975; Doise et al., 1974; Perret-Clermont, 1980). The tasks used in these studies were primarily the conservations of weight, length, quantities of liquid, or number (Murray, 1972; Miller & Brownell, 1975; Perret-Clermont, 1980), and copying geometric figures (Perret-Clermont, 1980); the knowledge to be acquired was a sort of procedural decisions rule. Children in groups of two (or three), consisting of a conserver or superior and a non-conserver or inferior, were required to deal with a given task in collaboration, and their performances on the posttest were compared with the performances of children who had been required to carry out the same task alone. These studies have found that peer interaction facilitated cognitive structuring not only for inferior children but also for superior ones. It should be noted that this was achieved without an adult's direct instruction or external reinforcement. According to the authors of these studies, this occurred because the awareness of the presence, and thus an attempt at integration, of different points of view was more likely to occur in peer interaction than individual problem solving.

This experimental Piagetian model for knowledge acquisition has at least two difficulties. First, it unrealistically neglects the role of feedback from the external world, i.e., through "epistemic observation" or "active experimentation," in the acquisition of knowledge. In the Piagetian studies described above, children were not usually permitted to experiment in order to examine their conflicting ideas. They were only allowed to exchange their opinions.¹ It is not realistic to think that knowledge is usually acquired through equilibration, without external feedback. The second difficulty of the Piagetian model is that it ignores the role of the adults who set up the situations for children's problem solving/knowledge acquisition. Even in the experimental peer-interaction situations described above, an adult (experimenter) played an important role in the sense that she directed the children to begin the work in collaboration. In daily life situations, apparently spontaneous peer interaction is, in fact, likely to proceed under the indirect influence of adults. Therefore, an adequate model of knowledge acquisition through peer interaction should take into account the adult's role as well. We would like to propose a model eliminating these difficulties.

¹In a study on the conservation of quantities of liquid by Perret-Clermont (1980), children were permitted to use a glass as a sort of measure, if so desired. However, Perret-Clermont did not comment on the importance of this aspect.

The model

We assume that younger children can acquire knowledge without adult's direct teaching, by their collective enterprise in a group whose members share an interest in a certain topic. Unlike adults or older children, they cannot readily acquire knowledge when they individually attempt to do so. In other words, we regard a group whose members share an interest as a system for knowledge acquisition. A child does not have enough cognitive ability to acquire the target knowledge by himself/herself, but s/he can contribute to the system by saying things about the topic, by informal experimentation from his/her point of view, etc. Consequently, knowledge acquisition can be adaptively achieved by the whole system. In this system the member who contributes more tends to change from moment to moment in the inquiry processes. That is, the order of "capability" is not fixed as it is in Vygotsky's "vertical" interaction.

In our system, an adult may function in two ways. First, the adult sets up situations where children are able to engage in their inquiry in a group. S/he provides them with equipment and/or materials to manipulate, explore, etc. S/he also sees to it that children interact with one another smoothly, without much quarreling. Secondly, s/he may sometimes take a role of a "more capable peer" in an attempt for knowledge acquisition. When peer interaction comes to a deadlock in the inquiry process, i.e., when none of the children can achieve a further breakthrough, the adult can take over the role which a more capable peer would play. For example s/he can give an example which will stimulate the children's thinking, or help them clarify ideas they have put forward. It should be emphasized that taking over the child's role is all that s/he does; s/he is not expected to transmit verbally the knowledge to be acquired nor direct what the group is to do next. S/he indirectly supports the children's peer interaction, respecting their motivation for knowing, so that the interaction will effectively result in acquiring the knowledge. We will describe our model, which might be called an eco-social Piagetian model (or a dynamic Vygotskian model if you like), in more detail below, by using a case of the acquisition of "folklore" knowledge of making ice as an example.

Most of the knowledge acquired through children's peer interaction in daily life situations can be called folklore knowledge. This knowledge has the following features: a) it concerns an event in the natural world; b) it is based on empirical evidence; c) although it has some conceptual component, it is primarily procedural, and relatively isolated from other events as most people perceive them; it can often be stated as [If we do X, then (it is likely to have) Y] or [In order to get Y, do X]. Let us give you an example. Suppose that day care children are allowed to sow flower seeds in any place they like, and that they compare their results with one another. In this situation they are likely to get some knowledge on plant growth, such as "If we step on a place where the seeds are sowed, the buds will not come out." "If we do not give our plants food (fertilizer), we cannot get big and lively flowers." "If we give them too much water, the buds will not come out." These are examples of folklore knowledge. Although in this case children do not understand mechanisms underlying

plant growth, they acquire some procedural knowledge concerning what contributes to the growth of buds and blooms. In addition, they often acquire some conceptual knowledge as well through analogies with human beings. The following utterance by a child is a good example: "Flowers are like men. If flowers eat nothing much, they will become ill." (Motoyoshi, 1979, p. 136).

Before going into the details of our model, we would like to illustrate it with a brief description of how a number of children went about making ice (See the appendix for details), as observed by Motoyoshi, an experienced teacher of a day care center in Tokyo, and reported in her book (1979). Though probably incomplete as an observational document, in that the teacher (recorder) was likely to omit some events that did not attract her attention, this case is interesting in itself, because it shows that "folklore" scientific knowledge can be discovered through collective enterprise by day care children who have been encouraged in peer interaction, and we think it is quite useful to illustrate our model.

Making ice

Several 5-6 year-old children were playing by stepping on a frozen swimming pool. One of them uttered a question, "Why are there days when the water of a swimming pool freezes and when it doesn't?" This question interested the group of children present. They were motivated to discuss this topic, and through this discussion they strengthened their motivation to know about this phenomenon. As a result, they decided to try to make ice by themselves. The children chose the vessels they liked and left them filled with water in the places they liked before they went home. The next morning they compared the results with one another in terms of whether or not the water in their vessels had frozen. They found that water in the same kind of vessels did not always turn into ice with the same thickness, and that water in the vessels which had been put in the same place did not always freeze in the same way; sometimes it froze and at other times it did not. These findings motivated them to do an "experiment" for making ice repeatedly for several days. On the ninth day, they could specify relatively well the conditions under which water freezes, i.e., they had acquired procedural knowledge about freezing.

A teacher joined this group as if she were an ordinary member. This is, she was engaged in the inquiry as the children were, but at the same time, she encouraged the children to continue their inquiry by showing interest in their ideas/motivation for knowing. For example, she permitted them to use any vessels and any places in the day care center they wished in order to examine their ideas. In addition, she sometimes took the role of a more capable peer when the peer interaction appeared to have come to a premature halt. For example, she stimulated children's thinking by giving a counterexample when the inquiry seemed to be about to stop because a majority of children accepted a wrong hypothesis.

Stages of knowledge acquisition

The processes of knowledge acquisition through peer interaction consist of cycles of four stages. A complete cycle comprises four stages, but there may be incomplete cycles as well; one or two of the four stages, espe-

cially the third stage, is likely to be repeated; the last stage of a cycle and the first stage of the following cycle sometimes overlap each other. The first stage is characterized by the initiation of information seeking (or knowledge acquisition). Generally speaking, acquisition of knowledge is initiated by either epistemic curiosity (Berlyne, 1963; Hatano & Inagaki, 1971; Inagaki, 1982) or by the desire for inducing an event which people value in some sense, as in the case of alchemists. When these two motives are combined, the initiation of information seeking must be accelerated. That is, when people are exposed to the non-occurrence of a desirable state, Y, contrary to their expectation, they are likely to be motivated to ask why, how, etc. and to seek further information.

We find a good example of this in "Making Ice." (See the 'Beginning' section in the appendix.) Here the joint arousal of the two motives contributed to the initiation of seeking further information. That is, the children desired to have a frozen swimming pool so that they could play on it, but they found that they could not always do it, since, to their unexpected disappointment, they had days without ice. This cognitive conflict was later strengthened by facing disagreement on the causes of freezing; some children insisted that freezing was due to rain and others disagreed.

In the situation like this, we expect that children are likely to have such a question as "Why didn't it happen?" When this type of question occurs to them, we also expect that they will either request an adult to give explanations, or continue the investigation by transforming it into a question such as "How can we make it happen?" A question such as "How can we make it happen?" is spontaneously asked by children in some cases; in other cases it is asked intentionally by a teacher who wants the children to discover a new fact for themselves. Nagano (1970) insists that teachers should give young children the "manipulable" objective of producing the target phenomenon in order to motivate their scientific inquiry. In other words, teachers should ask such a question as "how can we make it happen?" rather than why-questions in order to help children initiate the acquisition of knowledge. An utterance having the same function as this type of question is seen in 'Beginning' of "Making Ice," i.e., the proposal, "Let's try to make ice," offered by a child.

The second stage is that of the production of a number of hypotheses about the key question such as "How can we make it happen?" That is, children are expected to produce hypotheses like "We can make it happen by doing X." The proponent of a hypothesis like "We can make it happen by doing X" may try to justify it on some ground, in order to make it persuasive to his/her peers. The following are seen as major justifications: a) justification based on the proponent's direct experience; b) justification based on indirect experience, i.e., s/he has read or heard about it; and c) deductive justification from his/her prior knowledge, e.g., meta-procedural knowledge. A concrete instance of the last category is a child's saying, "Plants need sunshine in order to grow. The place by the fence is often in the sunshine. Therefore, if we plant a flower by the fence, it will grow well."

However, this does not mean that young children can always give such a justification. What is important

here is that children can produce a number of hypotheses, and that some of them feel a certain hypothesis is so plausible that they consider it worth examining. Disagreement among children as to the truth of the hypothesis may even more strongly motivate its supporters to confirm it. On the contrary, when a majority of children come to accept a hypothesis, their inquiry may easily terminate at that point. One of the strategies which a teacher can use in this case is to give children a counterexample. We find a good example of such a strategy in "Making Ice." Here, seeing that a majority of children were about to agree with the idea that being placed inside prevented the water in the vessels from freezing, the teacher gave them a counterexample (See T2).

A reservation should be added: Hypotheses which children produce at this stage are expected to be different from the ones which adults produce in their scientific inquiry processes. That is, children rarely construct some explicit model involving mechanisms explaining the occurrence of observable event(s). Usually, their hypotheses are described in a procedural form. The child's utterance, "If we plant a flower in the sunshine, it will grow well," is a good example of this.

In "Making Ice" the second stage of the production of hypotheses is found several times. In some cases a hypothesis is implicit in that we can only infer its existence from what the children did and how they commented on it. In other cases a hypothesis is explicitly stated by children. A typical example of the former is found when the children generated a hypothesis that some features of the containers that hold water (particularly color and/or material) were critical. Before the children began experimentation, they did not state this hypothesis explicitly. However, we can infer that they implicitly held this hypothesis from their own behavior -- they left a variety of containers filled with water -- and from utterances such as C11, "I could make ice in my bucket, but *Miho* couldn't, though *Miho* and I used the same kind of blue buckets." A good example of the latter, i.e., explicitly stated hypothesis, is seen in C20, "Let's leave the vessels in different places," or C18, "First, I left my vessel inside. The ice I've got there was thin. [The] Next day I left my vessel outside. I was able to get thick ice there. On that day the water in *Miho's* vessel didn't freeze. I suspect *Miho* left her vessel inside." Children here seem to have had a "place" hypothesis, which regarded the place where containers were put as a critical factor.

The third stage of knowledge acquisition is that of experimentation. Children usually do not possess the scientific rigor of adults. There is only weak correspondence between a hypothesis to be examined and the experimental design in everyday inquiry by children. If a hypothesis is "If we do X, then we will get Y," the simplest test for children is to run an experiment by doing X all the time, without worrying about the control condition. As a matter of fact, however, some children who are against that hypothesis, will run an experiment by trying X¹ (something other than X). Thus it becomes possible to compare the effects of X and X¹ in the whole system. Although an ideal experimentation requires us to hold constant all the possible variables except X and X¹, or to change some variables systematically, children, in fact, are unlikely to control these vari-

ables. Consequently, the experimentation often contributes not only to confirm/reject a particular hypothesis but also to induce new questions. We see a good example of this in the experimentation based on the "rain" hypothesis in "Making Ice." That is, when the children were doing experiments according to the hypothesis that rain might be related to freezing, they encountered an interesting event, i.e., all the water in the same kind of vessels did not turn into ice with the same thickness, because they had failed to control the place variable. Although this experimentation confirmed the prediction that the water in the vessels froze even if it did not rain, at the same time it elicited a new question in the children, who failed to notice the difference of temperature between inside and outside. Thus their inquiry continued.

This third stage is also recognized several times in "Making Ice." A typical example is seen when children experimented by leaving containers in various places, following the proposal of C20 involving the "place" hypothesis. When the results of an experiment is found to be inconclusive, possibly another test will be run, usually adding refinements. Accordingly, when the children found that water in the same kind of vessels had not frozen in the same way, a more refined experiment where the place variable was to be held constant was done, as suggested by the proposal of C14, "Let's leave our containers in the same place." When the children found that no water in any vessels which had been put in the same place turned into ice, the same experiment was repeated, as C16 suggested, "Let's leave the vessels as they were once more." Needless to say, the teacher's implicit encouragement would certainly contribute to having the experimentation continue. If the teacher had considered such experimentation unimportant or impossible in early childhood education, the children's inquiry might have been easily blocked out.

The fourth stage of knowledge acquisition is the collection of data and induction. Children reach a conclusion of their own through induction based on the results of the experiment(s). Two kinds of induction can be distinguished. One is schematic induction: Children derive a conclusion with confidence by applying their preexisting schema to incomplete data. A good example is seen in "Making Ice." Children there did experiments to confirm their "feature of vessels" hypothesis, and left various vessels filled with water in the same place. When they found that only the water in a styrofoam vessel with a lid had not frozen, they were convinced, through this one observation, that the lid had prevented freezing (See the first four sentences in 'Fourth Day' in the appendix. This is probably because it was consistent with their "shelter" schema ("Shelter reduces influence from outside"). The second type of induction is a cumulative one. This is primarily empirical induction based upon cumulative experience. The knowledge about conditions of freezing which the children expressed in 'Ninth Day' was a product of their cumulative induction.

This fourth stage of knowledge acquisition is also recognized several times in "Making Ice," following the experimentation(s). C8 comments, "Now I understand. The water in vessels freezes even if it doesn't rain," represents this stage. A new question sometimes occurs in parallel with the stage of data collection and induction

about the old one. The original question is to examine whether or not doing X causes Y, but it can be found that doing X in fact causes different Ys in terms of grade. Then children are likely to pursue a new question of what differentiates Y₁ and Y₂. If they can transform this question into such a form as "How can we make Y₁ and Y₂ happen?" this inquiry will proceed further. In a continuous inquiry process like this, investigation often goes on even if there is no difference between Y₁ and Y₂ in terms of practical value. A good example of it is seen in 'First Day' of "Making Ice." At the beginning, children were oriented to make ice (Y), probably in order to use it in playing afterwards. Thus they were eager to confirm whether the water would turn into ice even if it did not rain. However, when they examined the result of the experiments in relation to the "rain" hypothesis, they found out the new fact: that the water in some vessels turned into thick ice (Y₁), while the water in other vessels turned into thin ice (Y₂). This finding motivated them to know what factor contributed to the difference (See the utterances of C9 and C10). The children then continued their inquiry; they seemed to have an implicit hypothesis that features of vessels might be related to freezing. The inquiry which children were engaged in at this point possibly changed from usefulness-oriented, where making ice had some practical utility (as a means of playing afterwards, to knowledge-oriented (or epistemic), where knowledge was sought for its own sake. This change contributed to the production of deeper understanding.

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Beginning

Several 5-6 year-old children were playing by stepping on the frozen swimming pool in a day care center. This activity was initiated spontaneously by these children. A teacher joined them later.

- C1: The water of the swimming pool isn't frozen hard today. The surface ice is thin. We can't step on it. It was frozen hard both yesterday and the day before yesterday, so I thought it must be frozen today, too.
- On the following morning the swimming pool had no ice at all. The children were discussing this with one another as follows:
- C2: Didn't the water of the swimming pool freeze because it didn't rain?
- C3: No. It has frozen without rain.
- C4: Why didn't it freeze today, then?
- C5:
- C6: It's strange.
- C7: Let's try to make ice.

Then, these children left a variety of vessels filled with water anywhere they liked before they went home. (Since other children who heard about the "experiment" for making ice, and were interested, joined the original group, about 13-14 children participated in this activity.)

First Day

Next morning they found that the water is almost all the vessels had frozen.

- C8: Now I understand. The water in vessels freezes even if it doesn't rain.
- C9: Look, Miss M (teacher), the ice in *Hayato's* and *Miho's* is thin
- C10: Why is their ice so thin? [Although only *Hayato* and *Miho* had put their buckets inside, no children seemed to notice it].

Then [the] children decided to continue this activity of making ice. They left the containers filled with water when they went home. The containers chosen by them were varied: empty cans, bottles, jars, plastic and wooden buckets, styrofoam vessel, basin, etc.

Second Day

The water in the containers of all children except for three (*Miho*, *Takako*, and *Yoshinori*) froze. The ice in *Makoto's* container was thick.

- C11: It's strange. I could make ice in my bucket, but *Miho* couldn't, though *Miho* and I used the same kind of blue bucket.
- C12: *Yoshinori* and *Kyosuke* used the same kind of jam jars, but *Yoshinori* couldn't make ice. [*Miho*, *Takako*, and *Yoshinori* had put their containers inside, but children did not notice that.]
- C13: It's puzzling, isn't it?
- C14: Let's leave our containers in the same place.
- Following C14's suggestion, children left their containers together at the corner of the porch.

Third Day

The water in the containers which had been at the porch did not freeze at all.

- C15: It's strange. I wonder why we couldn't make ice. I suspect it is due to the fact that all of us put our vessels in the same place.
- C16: Let's leave the vessels as they were once more.
- This proposal was accepted by the other children. They left their containers in the same place as they did the day before.

²Taken and translated from Motoyoshi (1979). C shows child's utterance; T shows teacher's utterance. Numerals attached to C/T show the order of utterance.

Fourth Day

The children were pleased to find that the water in nearly all the containers had frozen. However, one of the children, *Kayoko*, complained with a tearful face. "The water in my vessel didn't freeze." *Kayoko's* vessel was a styrofoam one with a lid. When the children found this fact, they concluded that the lid had prevented freezing.

C17: The water in *Miho's* and *Yoshinori's* vessels froze today.

C18: First, I left my vessel inside. The ice I've got there was thin. Next day I left my vessel outside. I was able to get thick ice there. On that day the water in *Miho's* vessel didn't freeze. I suspect *Miho* left her vessel inside.

T1: *Miho*, did you leave your vessel inside?

C19: I saw *Miho* putting her vessel on the locker every day.

T2: I left my vessel inside of the front door, but you see, it is frozen.

C20: Let's leave the vessels in different places.

Following C20's proposal, children left their containers in various places, such as behind a storeroom, at a sunshiny porch, on the south side of a henhouse, in a washroom, on the north side of the day care center building, in their playroom, and in a staff room.

Fifth and Sixth Days

It did not freeze at all on the first and second days after the children began to do this new "experiment."

Seventh Day

Only six vessels, which had been put on the north of the day care center building were frozen. The ice in one of them, *Makoto's* can, was thick and hard.

Ninth Day

On the ninth day after [the] children began to engage in the activity for making ice, they expressed their ideas on freezing as follows:

- a) There are days when water in the vessels left inside does not freeze, and when it doesn't.
- b) Even if water in vessels left inside does not freeze, we cannot say that water outside will not freeze as well.
- c) It is strange that the water in some vessels turns into thick ice, while in others, thin.
- d) The water in *Makoto's* vessel always turned into thick ice. His vessel was a shallow cookie-can.
- e) When we left the bucket full of water (outside), the water on the top froze, while the water at the bottom didn't. Thus the water at the bottom is warm, I suspect.
- f) The rain has nothing to do with freezing. The water seems to freeze on cold days.
- g) The water in *Kayoko's* styrofoam vessel did not freeze hard, even when she removed the lid. It seems to be warm.

Myth and Experience in the Trobriand Islands

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This paper examines the way in which the knowledge of a myth is brought to bear on the interpretation of experience. It is a topic that requires an eclec-

tic approach since the issues it raises are simultaneously part of a venerable tradition in anthropology concerning the role of myth in society, and part of a new research area in cognitive science concerning the nature of the processes by which people interpret and understand their world. Since the argument I will make ranges across several disciplines and involves details of a society unfamiliar to most readers, let me present a brief sketch of where we are going.

The events to be interpreted are those surrounding an encounter between a Trobriand Island village and the spirit of one of its recently deceased members. I begin with a brief ethnographic sketch of the nature of spirits of the dead in the Trobriand Islands which is intended to equip the reader to make sense of the events reported. The next section describes an actual case of a spirit haunting a village and examines a first-person narration of an encounter between a villager and the spirit of the deceased. These events are the stage for the phenomenon we wish to understand. That is, an old woman's account of how she saw a cosmological question in those events and how a sacred myth provided her with an answer. The heart of the paper is an examination of what the myth contributed to the old woman's understanding of the events she sought to explain. I will argue that the myth has two kinds of connections to experience. One is an explicit link based on a belief in the power of mythic events as historical precedents, and the second is an implicit and unadmitted link based on a similarity of organization between the events of the myth and the events of life. Although the historical link is emphasized by Trobrianders, an examination of the implicit link based on shared structure shows the myth to be a transformed description of repressed thoughts about contemporary relations between the living and spirits of the dead. That is, the myth is shown to be a cultural defence mechanism. I conclude with a discussion of how this role of myth accounts for two otherwise anomalous properties of myths.

The ways of the spirits

There are three principal types of Trobriand spirits of the dead, *baloma* (also known as *yaluwal*), *totaloi*, and *kosi*.¹ All three types of spirit are normally invisible to living persons. *Baloma* are the more or less permanent spirits of people. When a person dies, his *baloma* goes to reside on the island of Tuma, a real island located about 10 miles north west of the main island in the Trobriand group. The *baloma* return to their natal villages during the harvest season each year and partake of the spiritual goodness of harvested yams and valuables which are placed for them on special platforms out of doors. When they are in the village, the *baloma* sometimes indulge in mildly annoying pranks such as making noises and moving things, but people do not find them eerie nor do they fear them the way Europeans fear ghosts. At the end of the harvest feast, the *baloma* are unceremoniously driven from the village by gangs of children who shout and swing sticks. This driving out is called *yoba*. The *baloma* then return to Tuma where they remain until the next year's harvest feast. *Kosi*, in contrast to the permanent *baloma*, are a sort of transient

¹See Malinowski's paper, "Baloma: Spirits of the Dead in the Trobriand Islands" (1954), for a more detailed discussion of the nature of *baloma* and *kosi* and of their relationships to the living.

spirit that is present in the vicinity of the village only immediately following a person's death. They are much more malevolent than *baloma*. When a *kosi* is in a village at night, villagers say that it "rounds" the village. The verb "round" describes the movement of the spirit from house to house. An attentive listener can actually follow the progress of the *kosi* as the screams of those visited emanate first from one part of the village, then from another.

The unpleasantness and the duration of visits from *kosi*, are said to be related to the social character of the deceased while he or she was alive. If the deceased was a sorcerer, an adulterer, or a food thief, for example, the *kosi* is expected to be malicious and will remain in the village for a long time. The spirit of a more innocuous person is called *totaloi* or *nataloi* depending upon the gender of the deceased. The root *-taloi* refers to the minor rituals of leave taking performed by socially engaged parties when they part company. *Totaloi* may appear to kinsmen in the days immediately following their deaths. Such encounters are sad, but not at all frightening. For example, the spirit of a young girl appeared to her mother the day after her death to request that her favorite hymn be sung in church.

In the time before the arrival of the church, the *kosi* were only encountered out of doors. The sound of footfall in darkness on a jungle path at night, or the otherwise unexplained rustling of vegetation in the deceased's garden enclosure may be taken as evidence of the presence of a *kosi*. In the village, a *kosi* might call out a person's name or throw a stone or slap the thatched wall of a house much as a *baloma* might do during the harvest season. Summing up the reaction of Trobrianders in his times, Malinowski (1954) called *kosi*, "the frivolous and meek ghost of the deceased who vanishes after a few days of irrelevant existence" (p. 154). In more recent times, however, *kosi* have taken to confronting people in a visible form in their homes as they lie in what we would call hypnagogic sleep. The Trobrianders call this state *killisala* and describe it as resting with the eyes closed, but with the ears open and the mind awake. They are adamant that it is not sleep, and the events experienced in that state are real events of this world, not dreams. The denial that these events are dreams is supported by items of evidence such as the fact that *kosi* knock things off of shelves and throw stones on the roof when everyone is wide awake. In these contexts of course, the *kosi* is not seen.

Encounter with a *kosi*

In March of 1976, Toigisasopa (a pseudonym), a prominent and feared citizen of a large Trobriand village died. For more than a month following his death, the village was plagued by almost nightly visits from his *kosi*. The *kosi* appeared to those who were visited as the ghoulish figure of the rotting corpse of the deceased. As time went on, his reported appearance became increasingly revolting.

The following is a translation of an excerpt of an interview with a woman who had twice been visited by this *kosi*.

Yes, I'm just telling you. He was out walking about and he came to our place. I woke and saw him come in. His face was awful -- completely black, his arms and legs were like those of an undernourished child and his belly was bloated. He just came in and grabbed my legs. I lay there. My body

was completely numb and paralyzed. Then I kicked and the old man (her husband) felt me kicking. He roused me and I grabbed him and cried out.

He asked, "What was it?"

"Toigisasopa's ghost!"

By then my body was recovering from numbness a bit. The odor was very bad. The first time he just looked black, but this second time, you know, it was as if there were holes in his body as well. It gave the house a terrible odor.

Myth interprets life

For nearly a month I heard similar reports of visits from the ghost. Many, but by no means all [*] villagers were visited by the spirit of Toigisasopa, and the village as a whole was quite disturbed by the length of the stay of the *kosi*. Near the end of Toigisasopa's stay in the village, an old woman came to me with the following introspective account.

One night she lay in her house and listened to the screams from the houses around her. She had no trouble understanding what was happening. She knew about *kosi* and had been in many troubled villages in her life. She had never seen a *kosi* herself and she wondered why it was that spirits of the dead were never seen as they moved from house to house, or while throwing stones, or slapping the thatched walls or calling names to startle people. She said that in considering this question, she remembered that it had not always been so. Long ago, the *baloma* would come into the village and sit with their kin, chewing betel nut and conversing in a pleasant way. They were generally amicable and even helpful. This old woman remembered the myth of Baroweni, and it, she claimed, provided the answers to her questions.

As we shall see in our examination of the text of the myth itself, myths form one of several classes of oral tradition in the Trobriands. The major contrast here is between sacred myths, *liliu*, and folk tales, *kukwanebu*. Both *liliu* and *kukwanebu* are sometimes told in the story telling sessions that occupy many idle hours in the rainy season. The events that are depicted in both genres are placed in time long long ago beyond the stretch of ordinary historical time. But *kukwanebu* are told entirely for their entertainment value, and tend to be a bit bawdy, whereas *liliu* are thought to have a message and the events they describe are often taken as historical precedents for the states of affairs in the contemporary world.

A full translation of the telling of the myth as I recorded it is given below. I have included some additional commentary on a paragraph by paragraph basis where the telling of the myth assumes listener knowledge that is particular to Trobriand culture. By in large these are things that from the Trobriand perspective go without saying.

Hey, Baroweni's mother had died. She had died and Baroweni was already pregnant. She was pregnant. At the time she was to give birth, another woman in the village was dying. She was on the verge of death -- they had already made the mortuary preparations for her. Baroweni went to her and said, "Go to my mother. Tell my mother, 'Hey, your child is pregnant and will soon give birth. Take food to her.'"

This section establishes the relationships of the major actors in the myth to each other. This is important because Trobriand mothers have a special obliga-

tion to care for their pregnant daughters. Also, Trobrianders make no effort to conceal their assessment of an ailing person's chances of survival from that person. Those who are about to die provide an obvious communications link between the world of the living, and the world of the dead. Asking a dying person to take messages to Tuma is a common occurrence.

So the dying woman died and went [to Tuma]. She told her companion there (Baroweni's mother). "Your child is pregnant and close to giving birth, but what shall she eat?" She said, "She told me to come and tell you, "You should take food to her."

Here the stress is on the mother's obligation to feed her pregnant daughter. In fact, the female kin of the pregnant woman are also responsible for feeding both the new mother and the infant for several months after birth.

So the spirit (Baroweni's mother) got up and began cutting taro shoots. She raised the taro shoots onto her head and rose up (as a spirit rises when it leaves the corporal body). She came. She continued on, what's it, at Tuma on the main beach at Kutuvitu, on their beach at Tuma. She came ashore and continued on there are Libutuma.

There is an interesting mixing of attributes here. The spirit carries her load on her head as all Trobriand women do, yet the verb used to describe her rising is not one used for a woman, but one used to describe the rising of a spirit from a corporeal body.

(directed to me) Shall I sing the song that you might hear it? "Baroweni, Baroweni, Baroweniweni. I will set it down, I will set it down. Oh, my neck. Oh, my neck. . . . Oh, my neck. We (inclusive dual) suppose a girl is standing with us whose name is *yaluwa*."

As we shall see, variants of this ditty are sung at several points in the story. Baroweni's mother whines her daughter's name and complains of her desire to set down her load and the pain it causes in her weak spirit neck. The last phrase in the ditty suggests a dual persona for the mother. She supposes or assumes a girl is standing with her, but her name is just *yaluwa* or spirit.

So she walked and cried, and in that way she entered a village. She just cried, she was crying for her child. Because she was a spirit she couldn't touch anything or hold it. She had already died, and there was nothing she could hold.

This makes clear the source of the mother's discomfort. She is carrying real taro, but as a spirit, she is known to be unable to carry anything. The explanation of this comes in the next sentence of the telling of the myth.

However, this is a *liliu*. This happened long long ago and for that reason (it is as it is).

Here is our first indication that inferences based on present day understandings of the world are not always applicable to myth. That it happened long long ago is sufficient explanation of events which violate common sense knowledge.

She just continued on to -- what's its name -- Yalaka. . . . Buduwelaka. Yes at Buduwelaka she was just the same, crying, crying for her child.

"Baroweni, Baroweni, Baroweniweni. I will set it down, I will set it down. Oh, my neck Ya! Oh, my neck. She just scoops it up the girl that stands with us (inclusive dual). Her name is *yaluwa*. We are surely overloaded."

This because she had already died.

The ditty that Baroweni's mother sings is a magic

spell that she uses to cause the taro to be carried. Since she is dead, she cannot carry things in a normal fashion. Notice that the mother's persona is completely confounded with that of the spirit girl whose presence she invokes. She says she herself would like to put the basket down, it is her neck that hurts, yet she refers to herself and the spirit girl using the inclusive dual form.

She just brought it and continued on to Okupukopu. At Okupukopu she chanted just the same as she was crying, crying for her child.

"Baroweni, Baroweni, Baroweniweni. I will set it down, I will set it down. Oh, my neck. Oh, my neck. Oh, my neck Ya! Oh, my neck. What is her name? What is she? Girl or person? But her name is *yaluwa*."

Because she was already dead there was nothing she could touch or carry on her head. And this: she was of the time long ago, our (exclusive plural) ancestor's time. (then directed to me) I shall take it to its conclusion that you should grasp it?

The use of the exclusive plural possessive form here in referring to the ancestors makes it clear that these asides about the time of the ancestors and the special nature of events then are directed at me as an outsider to the culture.

She continued on from Okupukopu to Ilalima. At Ilalima it was just the same. She went then to Osapoula.

It was night when she arrived and everyone was sleeping. She knocked on the coconut fronds (the wall of the house). Her child woke up and said, "Who are you?"

Having the mother arrive in the village at night is plausible since spirits are most active at night. It also simplifies the story because even though the mother is a visible spirit, she could be unseen in the darkness.

She said, "I am your mother. I have brought your food. Open the house."

Her child opened up her house. She went to her and saw her mother putting down the food basket she had been carrying on her head. In the night there she (mother) told her, she said, "Hey, go prepare the area behind the house as if, wa, as if you were to plant flowers there."

She said, "Take these (the taro stalks) and bury them. They will be yours to eat with your child. When the seed root has sprouted, cut off the side roots. Cut off the side roots and replant the seed. The side roots alone you shall eat with your son. You prepare behind the house. I shall go beside the house and sit. I shall be watching you."

This is interesting since a family metaphor is commonly applied to the form of taro propagation referred to here. The seed corm is called *inala*, mother, and the side roots are referred to as *litula*, her children (Malinowski, 1965, v.2, pp. 105-106). Given the traditional importance of yams in the maintenance of descent group identity in the Trobriands it is surprising that the mother brought taro rather than yams to feed her daughter. It is possible that the existence of this metaphor for taro propagation, which has no parallel in the cultivation of yams, made taro a more felicitous symbolic choice than yams.

Her mother spoke well. She told her she would sit beside the house and watch, but Baroweni by herself was already going on with her things. She forgot. She boiled her food and ate. Her mother was sitting there watching her. She (Baroweni) picked up that container, a coconut shell bowl, a

soup bowl. Like those containers that the Lukwasisisga clan drank from. She just picked it up, drank her fill and threw it out beside the house. She threw it out and it drenched her mother's body. Her mother felt it.

She said, "Hey! Why did you dump that on me?"

She said, "Oh my! Mother mine, chieftan's wife. Mother no. . . I just forgot. I forgot about you." She hadn't looked to see her mother beside the house.

This event is outrageous in the Trobriand view of things. Remember that Baroweni's mother had gone to great effort and borne great pain to meet her responsibilities to her daughter. Trobriand children have a like set of responsibilities to their parents. Meeting these obligations is called *velina* and failing to meet them has moral as well as jural consequences. When children are young and need support, parents supply what is needed. When parents grow old, the roles are reversed. Children must care for their parents in their old age. This role reversal is sometimes marked by a mother addressing her grown daughter as *imagu*, mother. When parents become infirm and require constant care, this job falls largely on the grown children. It is they who must feed their aged parents, bathe them, and if necessary, carry them on their backs away from the village so that they might defecate. These responsibilities, burdensome though they may be, are taken very seriously by all. It is understandable, however, that parents sometimes grouse about not being well treated by their children, and children sometimes come to resent the imposition of a parent's needs on their lives. Here in the myth, Baroweni has failed to meet her obligations to her mother and she has done so in a particularly offensive way. Her mother brought food, and Baroweni has thrown food on her mother. Worse yet, she has done so, she says, because she has forgotten about her mother.

She said, "You have thrown out my soup. I shall return (to Tuma). I shall return, I shall go. You will stay here. I will split our (inclusive dual consummable) coconut. The lower half is yours. The half with the eyes is mine. (Directed to me) Where is that coconut? (I produce a coconut and she demonstrates).

She split the coconut. "This half is yours. The end with eyes we what drink, and it will be my coconut. I will go. I will go and then I will come back and see you. You shall not see me."

This ritual performance concludes the actual telling of the myth itself. The symbolism of the eyes in the coconut is not as transparent as it seems. The end of the coconut without eyes is called *kwesibuna* which means literally the "cold" part. So the mother has not only taken the eyes, she has taken the "hot" end of the coconut in a world where hot is potent and powerful. The remainder of the text is the old woman's commentary on the myth and her attempts to show the connection of the myth to the world of experience.

[commentary] Look, now-a-days people die and go (to Tuma) and their *kosi* come around, but we can't see them. He (Toigisasopa's *kosi*) sees us and wakes us up, but we do not see him, and this is the reason. Our ancestors have changed things. They come and see us. Our fathers and mothers die and go away and then they come back and are watching us. We see them not. But this old woman in times long ago started this. This particular *liliu* here. Some think it is just a fairy tale (*kukwanebu*), but it is real *liliu*.

However, if that woman, Baroweni had not done that, had not thrown out the soup, our mothers would be with us now. One would die. Later one would come back and and stay and be seen. But here she made her mistake. She grabbed that soup cup, drank from it and threw it out, hitting her mother who was beside the house. The old woman cast an appropriate spell. She said, "Why did you throw soup on my body?"

Notice the inference here that had Baroweni not made her mistake, our parents would be with us (visible to us) now. This is a direct connection between the myth and the situation of life as it is experienced.

She said, "Oh, mother, I forgot about you."

She said, "You yourself have banished me. You have injured me. I will go back (to Tuma)."

Here the terms of the mother's interpretation of Baroweni's act has escalated. The mother has no sympathy for Baroweni's excuse. She has equated Baroweni's accident with a grievous social act, *yoba*, banishment.

She got a coconut and told her child, she said, "I will split it in half you see. The lower end is yours. The end with eyes is mine. I will go away. When I come back, I will see you. You will not see me." So she went back and stayed.

You see, the other day when Toigisasopa was going around the village -- *totaloi* leave quickly and we don't see them for long -- anyway, he was blackened. His eye sockets were empty. His whole body was black. When he went to someone they would see this: (makes empty circles around her eyes with index fingers and thumbs.) Thus he appears to people lying in hypnagogic sleep. The other day I was listening to them screaming in the village. I thought to myself, "What is the source of this?" Oh, this thing from long ago. My mind went to these words (this myth).

This is what the old woman had to say by way of explanation for the perceived invisibility of the spirits of the dead. I have tried to make her words intelligible by providing background knowledge where needed. There are, however, several aspects of this myth that remain mysterious to me. Let me mention them briefly here in the hope that some reader may have an insight about them that has escaped me. First, the planting of taro close to the house seems very peculiar. The specific instruction that the ground be prepared as if flowers were to be planted has the appearance of a device that is in the myth for a reason, but I don't know what that reason might be. Second, of all the scenarios that could transpire between a child and a parent to cause the latter to punish the former by becoming invisible, why choose the throwing of food? And why soup in particular?

Here is a native professed example of the knowledge of a myth being used in the interpretation of an important and puzzling aspect of life. That in itself is perhaps interesting, but not entirely surprising. It is a confirmation of Malinowski's (1954) claim that "myth is not an idle tale, but a hard worked active force." (p. 101) But more remains to be said about the way the force of myth is brought to bear on life.

In her commentary on the story, the old woman emphasizes the fact that the story of Baroweni is the reason for the invisibility of the spirits of the dead. The relevance of this myth to the events surrounding the presence of the *kosi* in the village is, therefore, superficially apparent in the nature of the punishment

that is the conclusion of the mythic story. Baroweni's mother declared that Baroweni would no longer see her. This explicit connection is purported to be historical and causal. The causality of the connection is based in the cosmological status of *Iliu*, sacred myths, and appears in discourse in the form of a pervasive Trobriand metaphor. The myth is the *uula*, root or cause of the current state of affairs which is in turn the *dogina*, extremity of result of the myth. According to the old woman's introspective account, it was this causal connection that led her from her question about the invisibility of spirits of the dead to the myth of Baroweni. This connection is also the one emphasized by Malinowski (1954) in his analysis of the role of myth in primitive psychology. In considering another version of this myth which he had collected, he notes that such myths provide mundane precedents for some very unpleasant facts of life.

It brings down a great apprehension to the compass of trivial, domestic reality. The separation from the beloved ones after death is conceived of as due to the careless handling of a coconut cup, and to a small altercation. (p. 137)

This tantalizing quote raises the question of the source of the great apprehension experienced in this context. If this myth permits the separation from the loved ones to be conceived of as due to a small altercation, what else might it have been conceived of as due to? And there is something paradoxical about this historical relation of myth to the nature of life as it is experienced in the present. While the events of the myth have direct causal relations to states of affairs in the present, one does not have complete freedom to reason about events in myth the way one reasons about events in contemporary life. The time of myth is a special time in which things happened that do not happen today.

A mythic schema

When we look more closely at the myth itself and at how it is applied to the interpretation of the behavior of the spirits of the dead, we find that there are other connections between the myth and experience. These have to do with similarities in organization between the concepts encountered in the myth and concepts encountered in life. In order to make these similarities clear and explicit, I will introduce and use some tools from cognitive science. In the parlance of cognitive science, a *schema* is an abstract structure of relationships among concepts -- a sort of template for the construction of ideas. Schemata are basic units of knowledge (or belief) representation. Schemata refer to classes of concepts rather than to specific instances of concepts. If particular instances of concepts are mapped onto the schema it becomes a proposition, i.e., a statement about the relations of particular instances of concepts to each other. The process of assigning concepts to the slots in a schema is called instantiation.

The myth of Baroweni is an instantiation of a schema that encodes knowledge about relations between the living and the dead. This schema is based on a set of implicit theories about human motivation and human psychology. It implicitly attributes abilities, failings, behaviors and reactions to deceased persons and to their survivors.

The basic points of the myth can be summarized in

the following propositions.

A1: Baroweni threw soup on her mother

B1: Her mother was angry at her.

C1: Her mother punished her (by becoming invisible to her).

These three propositions are related to each other in that the event described in proposition A led to the event described in B which led to the event described in C. Each event in the temporal sequence is a necessary condition for the next. Thus, C implies B, which in turn, implies A. Therefore, by *modus tollens* reasoning, NOT (A) implies NOT (B) implies NOT (C). That is, if Baroweni had not thrown soup on her mother, then her mother would not have been angry at her and would not have made herself invisible. It is clear how these propositions are connected to each other and how the old woman can use the connections to make inferences about how things might have been different than they are. It is less clear how this is connected to the world of contemporary experience. The inference product that is stated by the old woman is that if Baroweni had not made her mistake, our mothers and fathers would be visible to us. So, with respect to the question of who can be seen by whom, we are to our deceased parents as Baroweni was to her dead mother. By making these substitutions into proposition C1 above, the following proposition is produced.

C2: My parents punish me by being invisible to me.

The old woman then uses the historical precedent function of the myth to build an inference structure of the form NOT (A1) implies NOT (B1) implies NOT (C1), which (by historical/causal link) implies NOT (C2). This is the inference chain underlying her somewhat elliptical statement, "If that woman, Baroweni, had not done that, had not thrown out the soup, our mothers would be with us now." Of course, there is no way to specify the nature of the causal mechanism underlying the historical link. But there is another connection that does not appear in the old woman's introspective account.

If these same substitutions of self for Baroweni and parent for Baroweni's parent are made across the entire mythic schema, the following episode results.

A2: I harmed (killed) my parents.

B2: They are angry at me.

C2: My parents punish me by being invisible.

Of course, this proposition is not overtly stated by the old woman. This transformation of the mythic schema provides a simple explanation of the invisibility of the spirits of the deceased, which is, after all, what is in need of explanation here, but it is a very painful explanation indeed.

In the exegesis of the knowledge required to understand the narrative of the myth the importance of filial duty was noted. We know that children often feel anxiety about meeting their obligations to their parents, and

we know that in the Trobriands (as in our own culture) elderly parents sometimes complain that they are not properly treated by their children. The themes that are present in these unstated propositions are known to be important and troubling to Trobrianders. If the historical causal link were indeed the only link between the myth and the experience it is marshalled to explain, then there are many scenarios that could arrange events in which spirits become invisible here ever after. But then why does the myth have this particular structure? I believe it is because this myth structure resonates with thoughts and fears that are experienced by Trobriand children (whether in childhood or as adults) upon the death of a parent. This is the source of the Trobriander's great apprehension over the separation from the beloved ones that Malinowski alluded to above.

Up to this point I have spoken of transforming the propositions in the myth to produce other propositions. In fact, that procedure should be reversed. It is not that the propositions that describe events in myth are transformed to describe events in life, but just the other way round. Propositions that describe events in life (in this case events that are so very painful that their memories are repressed) are transformed to produce the propositions of which the myth consists. In this way, the myth functions as a cultural defence mechanism.²

The myth is applicable to the class of situations which share with it a particular organization of concepts. We can discover what that organization is by generalizing across the terms in the propositions which describe events in the myth and those which describe events in life. Baroweni's mother in the myth and one's dead parents in life are both instances of deceased persons. Likewise, we (the living) and Baroweni are survivors of the deceased. In a world where there are no natural deaths, and where elderly parents depend upon their children for their very existence, a fleeting secret wish that one's burdensome parent were dead, or guilt about having failed to meet one's filial obligations can easily become the psychological equivalent of having killed one's parent. When these substitutions are made, the following more general schema is produced.

A0: I killed the deceased.

B0: The deceased is angry at me.

C0: The deceased is punishing me.

Having arrived at this more general schema I am ready to return to the phenomenon that brought these issues to my attention in the first place, the terrifying visits of the *kosi* of Toigisasopa. By placing Toigisasopa in the role of decedent and those villagers who were visited by his *kosi* in the role of survivors, the following set of propositions is produced.

A4: I wished the deceased dead. (I killed him).

B4: The deceased is angry at me.

C4: He (*kosi*) punishes me. [experienced in dream].

²For a discussion of other uses of schemata in the interpretation of everyday life, see Hutchins, 1980, chapter 5.

These propositions, like those involving the parents, are likely to be repressed. Given that this may be an important structure for the organization of ideas about the nature of relations between the living and the dead it is easy to see the mechanism underlying Trobrianders

assertions that if a man is bad in life his *kosi* will haunt the village for a long time and will be malevolent. Those who are sorcerers, adulterers or food thieves are likely to be hated by their neighbors. Those who are none of these things are less likely to be hated and/or wished dead by their companions in life. Thus, the deaths of powerful and evil men are likely to evoke many reactions of this sort from the community, while the deaths of more sociable people are likely to evoke few such reactions. Notice that the structure that embodies this truth comes in two flavors. The acceptable form is the commonly held opinion that "If a man is good in life, his *kosi* will not haunt the village." The unacceptable form which follows from the inference made with regard to the parents is, "Had we not harmed the deceased, his *kosi* would not be haunting us." The only difference between these two propositions is that in the latter, emotionally intolerable form, the nature of our relation to the deceased is attributed to the nature of our actions toward him, where as in the former, tolerable form, the nature of our relation to the deceased is attributed to a character trait in him. This is what the social psychologists call the fundamental attribution error. It is also a textbook example of projection.

Having described the repressed propositions that are transformed to create the myth, one may ask about the type of defence mechanism the myth is. Suppes and Warren (1975) propose a scheme for the generation and classification of defence mechanisms that is similar to and more complete than the one proposed here in their model, defence mechanisms are created by transforming propositions of the form, "self + action + object." The classification of the defence mechanism is based on the nature of the transformations applied. Among the transformations they describe are putting another in the place of self, projection; changing the nature of the act performed, intellectualization; and changing the identity of the object, displacement. The myth of Baroweni is produced by applying all three of these transformations to the original repressed propositions.

What do they know?

The application of schemata across sets of instances is a ubiquitous cognitive activity. Unexpected insights often seem to arise in this way. Metaphors and some types of humor are also based on the assignment of new instances to familiar schemata. This same process, which is clearly part of the province of cognitive anthropology, is also apparently at work in the creation and use of myths. This myth is both a charter or a precedent for an unpleasant fact of life and a model of relationships between the living and the dead.³ The schema it embodies is as applicable to contemporary

³The fact that the myth has both causal/historical and synchronic/interpretive links to the present may have been part of what led Dorothy Lee to the ridiculous conclusion that Trobrianders do not recognize or think in terms of causal connections among events.

personal relationships as it is to those of the ancestors with each other. If what I have said is true, then there is an important problem for those of us in this session and for other who are interested in the role of folk knowledge and belief in everyday cognition. When we turn to the complexities of cognition in real life settings distinctions between the realm of the cognitive and the realm of the affective begin to melt away.⁴ It is clear that a great deal of the knowledge used in the interpretation of everyday events is never explicitly stated. The sort of knowledge that resides in these unpleasant and unstated instantiations of the mythic schema cannot be ignored. To the extent that they may influence judgements, inferences, and other cognitive processes, they are things which are "known." Yet, in a sense, they are things that are too painful to be known. Trobrianders (or anyone for that matter) need cultural knowledge to understand the myth. And they use the schema of the myth to understand, perhaps in a more profound sense than they can admit, the events of their everyday lives.

Why sacred myths are sacred

In the telling of the myth, the old woman went to some pains to assert the truth of the myth and to impress on me that the events in myth cannot always be made sense of in terms of what we know about the present day world. Having examined the use of the *liliu* of Baroweni in the interpretation of these modern events, we can see why it is that the sacred myths are so adamantly defended. They are formulations that from the Trobriander's perspective *must be true*. Were they not true, then experience would be chaotic and exceedingly threatening. Remembering the myth must be a very rewarding experience since it allows the myth to perform its role as a defence mechanism. It allows the believer to confront the ugly subjective realities of deceased parents who can no longer be seen or a visit from a *kosi* with the sense that these are explicable phenomena. Not only can they be explained explicitly in terms of historical causality, the process of remembering the mythic schema that explains the events binds the dangerous, unstated, unconscious propositions to a conscious and innocuous isomorph. The situation is explained, and the disruptive propositions in the unconscious are transformed into acceptable elements of a description of an event that happened to someone else, long long ago.

It is not uncommon for ethnographers, in the course of trying to get the story straight, to challenge the consistency or validity of a people's beliefs. It has been done countless times with the beliefs of the Trobrianders. For the reasons given above, it must be very frustrating, threatening, and confusing for a believer to be told that his myths are not true. There is little defence against arguments that given what even believers know about the nature of the world the myths cannot in fact be true, yet there is a deep-seated but inarticulate feeling that something is being violated in the denial of the myth. Malinowski documented the reasons that the Trobriand people gave for the legitimacy of myth and interpreted their insistence on the truth of

myth as deriving from the necessity to maintain the historical connection to the precedents of the past. That is part of the reason that the *liliu* are sacred, but as we have seen, there is more to it than that. The gulf between the present and the distant past (*omiti bogwa*), the larger than life quality of the characters and their actions in myth, the unquestioned justice of their decisions, the insistence that in the past things were of a different sort than they are now, the denial that the inferences we would make today are applicable to the events in myth, in short, the whole collection of reasons that people give for the legitimacy of myth, are, like the myths themselves, defence mechanisms. The believer knows, in a very fundamental sense, that the myths *must be true*, but the real reason that they must be true (their role as defence mechanisms) can no more be admitted by the believer than can the memories and emotions that they defend against. The ethnographer collects these reasons for the truth of the myth, but they are, like the myths themselves, constructs which are erected to protect the believer from unpleasant facts.

And what of the truth of the myth itself? If we take the myth to be the propositions about Baroweni and her mother, then we say that those propositions are false. Trobrianders know that by their own criteria for judging truth and falsehood in their everyday lives this story cannot be literally true. The narrator's several asides to me concerning the fact that this all happened long ago when such things were possible show that by her criteria too, the story could not be literally true.

If, however, we take the myth to be the mythic schema, of which the story of Baroweni is but one instantiation, then the issue of truth is a different matter. That instantiation of the myth is not literally true, but what of the other instantiations which were indicated by the old woman in her application of the myth to her experience? The first of those other propositions was "If we had not injured our parents, they would be visible to us today." In my cosmology, this proposition is no more true than the story of Baroweni itself. My cosmology, however, is not relevant here. After all, I didn't see the *kosi* either. The subjectively experienced invisibility of the parents is perceived by the survivors to be retribution for harm that the survivors did to the deceased in life. This proposition is about the psychodynamics of ambivalence. If it were the case that Trobriand children did not feel guilt about having failed to meet their obligations to their parents, then perhaps they would still see them (in what we would call dream, of course) in amicable circumstances, as, we are told, they did so long ago before Baroweni's mistake.

The second repressed proposition was "If we had not harmed the deceased in life, his *kosi* would not be bothering us now." The truth of this proposition as a statement of the psychodynamics of ambivalence is perhaps easiest to see. The reasoning behind it would be "Had we not harmed him, we would not expect him to want to punish us. If he did not want to punish us, he would not be punishing us with his dreadful presence." Denied the protection afforded by myth, Trobrianders would be certain to experience great anxiety in these situations.

The sacred *liliu* must be true because the putative historical causal connection of myth to life depends

⁴D'Andrade (1981, pp. 190-193) argues the importance of cognitive scientists looking at cognition and after together as related parts of meaning systems.

upon the myth being literally true, and that connection is the only connection between myth and life that can be explicitly recognized. If the myth is to be recalled and used as an interpretive resource in understanding some troubling real world event, there has to be some connection between it and the event other than the inadmissible fact that it shares a common schema with the unconscious propositions evoked by the event. The historical/causal link provides that connection.

But, if the myth must be literally true to have its historical/causal effects and if, given whatall accept about how the world works now, the myth cannot be literally true, then what we all accept about how the world works now cannot be applicable to myth. The solution to this dilemma is the separation of the time of myth from historical time. This is the defense mechanism that protects the depository of defence mechanisms (myth) from challenge.⁵

The question of the "truth" of the myth is thus a complicated issue. While the myth is not literally true, there are profound truths about the human condition embodied in it. The texture of life, as it is experienced by the Trobriand Islander is strongly influenced by the mythic schemata that are embodied in this and many other myths. It is clear from this analysis that the superficial notion of the literal truth of any people's beliefs does not engender an appreciation of their profundity or of the richness of their interconnection to wider cultural processes.

Conclusion

Let me conclude now by summarizing the main points of the paper. We began with a description of an actual encounter between a Trobriand village and the spirit of one of its deceased members. We saw how myth was marshalled as an interpretive resource to provide a native understanding of the nature of the experience. An examination of the myth itself, and the putative historical/causal connection of the myth to experience, has shown that there is another, more compelling connection. That is that the myth is a disguised representation of repressed thoughts and fears concerning relations between self as survivor and the deceased. This myth's real connection to the events described, the link that brings it to mind in the context of the visit of the *kosi*, is the fact that the schema it instantiated is the same schema that is unconsciously instantiated in response to the visits of the *kosi*. The myth is therefore a culturally constituted defence mechanism. Finally, in examing how the myth functions in this role, new insights have been gained both about the reasons for the tenacity of native belief in myth and about the criteria that outsiders should consider in judging the verisimilitude of myth.

⁵This device is not unique to technologically primitive societies. Consider, for example, the following testimony given by a creation scientist in a recent court hearing.

We cannot discover by scientific investigation, anything about the creative process used by the creator because the used processes which are not now operating anywhere in the natural universe. (*Science*, January 28, 1982).

In order to assert the literal truth of accounts which, by our present criteria of truth and falsehood, cannot be literally true, the claim of the special nature of that time has to be made.

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More Talk About Then and There

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In our (French & Nelson, 1982) recent report of the language preschoolers use to describe familiar events, we discussed several linguistic and cognitive domains in which the competencies revealed in this context seem advanced relative to the competencies generally attributed to preschoolers in the literature. These include the ability to talk about events temporally and spatially removed from the immediate context, to describe events in general terms without reference to particular experiences, to use the timeless verb form and impersonal pronouns, to describe alternative possibilities for instantiating a routine event, to engage in hypothetical speculation, to impose an appropriate temporal structure on event descriptions, to move bidirectionally within this temporal framework, thereby demonstrating temporal reversibility, and to use appropriately a number of relational terms such as *before*, *after*, *because*, *so*, *if*, *but* and *or*.

Lois Bloom's (1982) commentary on this report suggests that we have misrepresented prior literature and failed to present new data of interest. In this comment we clarify some issues which apparently led Bloom to reach these conclusions, and comment on other issues raised in her critique.

First, there is a crucial point on which we were somewhat unclear and misled Bloom, and, possibly, other readers. While, as reported, we have elicited reports of familiar events from children ranging from 2;11 to 9;5, the data described in French and Nelson (1982) were entirely from preschoolers. We mentioned the older subjects to emphasize that for the most part younger and older children provide very similar reports.

Bloom's statement that our purpose was to describe the language development of the children from whom we had elicited event descriptions reflects a misunder-

standing of our claims. Our subjects were interviewed on, at most, two separate occasions a few weeks apart, prohibiting any longitudinal assessment of language development. Furthermore, the somewhat uneven distribution of subjects across the age-range sampled and the nature of the paradigm from which the data were obtained prohibited drawing any developmental conclusions based on cross-sectional comparisons. In fact, there seemed to be very few age-related differences in the analyses reported that could not be accounted for in terms of general advances in linguistic facility by the older (i.e., 5 year-old) subjects. Moreover, the procedures used and the amount of data collected from individual children prohibited drawing any conclusions regarding the ability of any given child to control a particular linguistic form or to estimate the frequency with which such forms might be used in this or in other contexts. Thus, contrary to Bloom's claim, no comparison of the frequency of complex sentences produced by our subjects and by those who participated in her longitudinal studies (Hood & Bloom, 1979; Bloom, Lahey, Hood, Lifter, & Fiess, 1980) can be drawn.

The real developmental import of our data arises from comparisons with other data reported in the literature. In line with the editorial guidelines of this newsletter, we did not cite this literature exhaustively, but rather discussed "the general case." Bloom takes issue with two of the several dimensions on which we claim our data differ from that generally reported in the literature -- the use of relational terms and the use of speech that is freed from the "here-and-now."

Our discussion of the import of the appropriate use of relational terms by preschoolers was formulated in terms of the reported failure of preschoolers to comprehend these terms in numerous experiments designed to assess their comprehension. Comprehension of these terms by preschoolers has usually been seen as a progression through various stages of partial understanding, prior to the achievement of "full understanding." These levels of partial understanding would lead one to predict production errors of particular types by subjects in the age range we considered (for example, *because* used as if it meant *so*, *after* used to mean *before*, and so forth). That we found no such errors challenges the conclusion reached by investigators relying on comprehension measures, and is fully in accord with the production data reported elsewhere by Bloom and her colleagues.

Bloom states that no one claims that preschoolers talk only about the "here and now." Our reading of the field is different. For example, introducing a discussion of children's mastery of the terms *before* and *after* between the ages of 3 and 6 years, a major textbook in psycholinguistics states: "When children talk about events they stick closely to the 'here and now.' They focus on what is happening, what has just happened, or what is just about to happen." (Clark & Clark, 1977, p. 506. Most descriptions of this period seem to concur in this view. We did not cite, and were not referring to the Bloom (1970), Bowerman (1973), and Brown (1973) studies when we claimed that the procedures followed in collecting language samples from preschoolers tended to yield language limited primarily to the here-and-now. Nevertheless, regardless of the range of settings in which young children's spontaneously occurring

conversations is sampled, it appears, from the extant literature, to remain highly likely that such language will tend to focus on the here and now. Indeed, an analysis of the use of *because* and *so* by subjects in Bloom's longitudinal sample (Hood & Bloom, 1979) showed these terms to be used almost exclusively to comment on the immediate context (including the just past and the immediate future). Our point, not a trivial one given the general assumption that very young children are cognitively incapable of talking about temporally and spatially removed events, is that such a conclusion is unjustified unless a deliberate effort is made to establish a context in which such language use is appropriate and perhaps necessary. Our interview format established such a context, and we found that children as young as 2;11 were quite capable of talking about temporally and spatially removed events.

Bloom points out that we did not contrast language about present and non-present events; this did not seem a crucial prerequisite to describing young children's use of temporally and spatially displaced speech given the prevalence of the assumption that young children's speech is limited to the here and now. However, a more recent study (Lucariello & Nelson, in preparation) has included this manipulation in order to begin to determine what the specific effects of different contexts on language might be.

Bloom is certainly correct that many people, including not only deLaguna (1927), but also Mead (1934), Werner and Kaplan (1963), Donaldson (1978), and Bates (1979), have suggested the importance of the gradual decontextualization of speech. Again, we did not claim to be studying the *development* of this phenomenon, but rather to be documenting that even by age three children appear to have the language forms needed to talk about events not supported by the immediately observable context and the cognitive ability to do so easily. The import of this is that this ability may *not* develop over a long period of time, as suggested by Bloom in her commentary, but may be well-developed very early.

While we agree with Bloom that there is probably no such thing as "purely decontextualized" speech, there is certainly a readily recognizable continuum along which the degree of contextual support for utterances may vary. An important component of our paradigm is that it requires children to address topics not supported by the immediately perceptible context. Whereas the interviewers' questions certainly provide a context of sorts, it in no way resembles the immediate temporal/spatial environmental context being referred to in claims that young children's language is limited to the here and now.

A final comment: our data are certainly mundane, and it might be that only developmental psychologists and psycholinguists would be surprised to learn that preschool children can talk appropriately about events they have experienced. Theoretical constraints and experimental data have led the field to a conception of young children that is in many ways quite at odds with the cognitive and linguistic competence they display in their everyday activities. Bloom and we appear to be in agreement that uncovering their real abilities and tracing the development of their actual competence should be major goals. We see no conflict here -- only some

difference in the kinds of data we each have that bear on these questions.

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This book is an important contribution to the study of reasoning processes in a naturalistic setting. By developing schemata of Trobriand propositions about types of exchange behavior which mark the transfer of rights to land, Hutchins provides an elegant model of Trobriand reasoning during land litigation. The main value of the study is that it models cognitive process rather than simply representing knowledge structure, and it does this by incorporating the socially appropriate premises of a culturally relevant task as the starting point. What we learn from the rigor as well as the ethnographic sensitivity of the model is that the difference between cultures in reasoning is not a difference in logic but a difference in the premises about the world which underlie inferencing.

I view Hutchins' study as a *tour de force* in its explicit formal representation of a piece of cultural knowledge and reasoning. For the sake of stimulating further discussion, however, I would like to point out one way in which his model is partial, and thereby raise a broader issue about the methodology of cognitive research in natural settings. The issue is that in moving from the experimental to the natural setting, cognitive research often retains the experimentalist assumption that the problem-solving task at hand is a neatly bounded one. This can predispose the researcher to view natural tasks as simpler than they actually are. Let me illustrate what I mean by considering Hutchins' analysis of a Trobriand litigant's argument in the court proceeding that provides the book's main case study. In recounting the history of his rights to a plot of land, the litigant -- Motabasi -- defined a particular prestation of bananas as one type of exchange while his opponent placed a different exchange definition on the same event. This particular prestation was critical in deciding the case because the competing categories used by the litigants entailed different sets of rights to the land.

Motabasi's definition of the prestation was not sustained by the court, an outcome that Hutchins attributes to an intellectual failure on Matabasi's part which

resulted from his "confusion over the conceptual identification of the exchange event" (p. 93), his "lack of knowledge" (p. 109), and his "misunderstanding" (p. 116). It is certainly possible in this case that Motabasi had faulty knowledge. But in view of recent literature in legal anthropology, an individual's failure of this kind is less likely a matter of his knowledge competence than his lack of political success in imposing an interpretation on inherently ambiguous events. "Errors" in classification in natural settings are often the outcome of a sanctioning social body legitimating one classification instead of another. A corollary of this sociological truism is that the political dimension provides a wider frame of cultural premises and inferencing in which the more formal legal code of the adjudication task is itself embedded.

One of the strengths of modern social anthropology is in showing that the ambiguity in any classification scheme (an ambiguity that may result also from the time lapse between the event and its interpretation) is a political resource as well as a cognitive stumbling block. Hutchins himself alludes to this in his discussion of the ambiguity surrounding the Trobriand classification of prestations. He notes:

The uncertainty of response to *pokala* prestations raises the point that people who deal in land transactions depend heavily on management of information in the field of actors. The strategies of land control are complex, and land controllers give away little information with regard to the dispositions of their lands (p. 32).

Although this insight is not incorporated into his cognitive model, it points to the issue of politically managing meaning in social life, a topic that has been most cogently discussed in social anthropology by Comaroff and Roberts' *Rules and Processes: The Cultural Logic of Dispute in an African Context*. One of their examples in fact parallels Hutchins' allusion to the manipulative potential of Trobriand prestations: A Tswana man can repudiate the definition of a marriage by trying to argue retrospectively that the cattle handed over was a loan or a payment of a debt rather than bridewealth (Comaroff and Roberts, 1981, p. 139). Their book could be use-

fully read in conjunction with Hutchins' work, as an exercise in integrating a sociopolitical analysis of the negotiation of categories and norms with a formal analysis of the knowledge and logic of norm utilization.

In summary, Hutchins' model is partial -- from a social anthropological point of view -- because although it models Trobriand jural rights pertaining to land, it does not incorporate the fact that such rules are often a resource used strategically by social actors to achieve goals that are outside the range of the jural rules themselves. Cultures are notorious for embedding tasks within tasks -- and the embedding of jural rules within a

process of social strategizing needs to be seen as an everyday reasoning task.

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