DOCUMENT RESUME

ABSTRACT
        This paper examines the methods used in designing
school and classroom environments. The tools are labeled: (1)
discipline-centered schooling; (2) empirical-naturalistic schooling;
and (3) great works schooling. First, the outline endeavors to reveal
the essential elements of the three tools that represent images,
structures, or "maps" of schooling. Second, examples of three sets of
normative claims or statements that describe what ought to occur when
classroom teaching is guided by each of the three different sorts of
mind-sets are considered. Lastly, the value of these physical models
to those who wish to participate in making justifiable decisions
about the changes toward improving the quality of learning in schools
is outlined. (14 references) (SI)

PHYSICAL MODELS OF SCHOOLING, THE 'OUGHT' QUESTION,
and
EDUCATIONAL CHANGE

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"One could do worse, in thinking through the problem of
improving the quality of education, than to turn to the
third-century philosopher, Plotinus, who called for an
education directed to 'the outer, the inner, and the
whole.' For Plotinus, 'the outer represented the public
person, the socioeconomic dimension of the total human
being; ' the inner' reflected the subjective dimension, the
uniquely experiencing individual, the 'I'; and 'the whole'
signified the universe of meaning and relatedness, the
realm of human, natural, and spiritual connectedness." [1]

"If the teacher-trainer remembers the triadic character
of teaching, this will help him, in particular, to avoid the
temptation - ... to suppose that there must be some single
method, *the* method of teaching, which is applicable in
the teaching of any subject to any pupil. ... the attempt to
formulate such a method leads either to a mechanical.
artificial approach to teaching, as in the so-called
'Herbartian lesson plan', or the vacuity of teachers'
manuals." [2]

Introduction

Education is a complex topic, the study of which requires one
to consider many perspectives, to consider the theoretical question of

what 'is' and the practical question of what 'ought' to be. Study of this sort necessarily entails philosophical assumptions about the nature of reality, about the nature of knowledge, and about the nature of value as it emerges within political, aesthetic and moral realms of human endeavor. Recent efforts to change our schools and our teacher-preparation processes have reemphasized once again the need to understand how reality can be seen by different persons, what effect that reality has on the structures of knowledge and underststanding such persons possess, and how these views of reality and structures of knowing affect the values they pursue when making changes in our system of schooling and teacher preparation.

Consider, for instance, the implications of the discourse emerging from the national reform movement which has been going on in education during this decade; more specifically, in terms of this paper, in New York State. It is saturated with such language as 'restructuring our schools,' 'teacher involvement in joint decision-making', 'collective bargaining,' 'professional boards,' 'mentoring,' 'liberal arts,' and 'internships.' During the recent annual meeting of NYSUT in Niagara Falls, for instance, First Vice President Antonia Corese told delegates, "We want to restructure schools to improve learning outcomes, but the process of joint decision-making must come about through collective bargaining."[3] During the same conference Commissioner Sobol stated that "We have to sit down together and come up with a way to develcp change. You have more power than you know,"... "You don't know the political and moral power you have. It comes out of your knowledge and genuine concern."[4]

Each of us is familiar with the hue and cry coming from many others regarding the need to change our schools, to improve the quality of educational outcomes we achieve with our students. Many of us are sensitive to these demands, many of us would like to accede to these demands, still many of us are a bit skeptical about efforts to change without some guiding map which we can use to direct our progress. And, for many of us, we are more than a bit concerned about change which is advocated from the top, from any bureaucratic structure, because of its frequent 'ivory tower' isolation from the 'firing line' in the classroom. I suspect that our concerns about such matters frequently are justified.

There is one large. overarching reason why I believe such

skeptical views frequently are warranted. We lack the tools required to sustain the vision, the imagry, of how we ought to design our instructional environments in order to improve the quality of schooling we provide students. Just as with any endeavor, whether it be surgery, legal practice, genetics, or audiology, there are proper tools, often of a physical sort, to use to achieve success in their varied processes. So, too, proper tools are required for shaping educational change in a rational way. It is absolutely necessary that we develop the sorts of tools which will enable us to achieve a measure of excellence in making our decisions about what changes to make to improve our schools and our instructional practices.

Lest anyone think otherwise, we need only keep in mind that each of us can and regularly does retain multiple paradigms in our minds regarding many of our daily experiences. We are not seriously burdened, for instance, when we are required to take an alternate route to our destination. We recognize the existence of such alternative paths, and employ them when the need arises. Such capability is a vital necessity if we are to move forward in any sort of significant way regarding the improvement of classroom instruction and the quality of comprehension our students develop.

During the few moments we have together I would like to develop a skeleton outline of some tools which we have constructed and which enable us simultaneously to look at three quite different ways of designing school and classroom environments. Time will prevent me from developing our material in as much depth as I would like. Hence there are going to be gaps which will remain puzzling to you. But we should be able to gain enough common understanding about the tools for us to engage in meaningful and enlarging dialogue at the conclusion.

Purposes of this paper

To develop this skeletal outline we shall endeavor (I) to reveal the essential elements of three different **tools** which will represent images, structures or 'maps' of schooling; (2) to consider examples of three sets of normative claims, statements which describe what **ought** to occur when classroom teaching is guided by each of these three different sorts of mind-sets; and (3) to develop a measure of understanding about the value these physical models can be to those of us who wish to participate

in making justifiable decisions about the **changes** we ought to make if we are going to improve the quality of learning in our schools

Assumptions

Anyone of us, no matter what his or her field or activity , always operates on a number of significant assumptions when engaged in discourse of any sort. In this paper three assumptions will guide our thinking: (I) Because of the complexity of schooling and classroom instruction, it is not possible for one to maintain clarity of vision regarding the significant elements in the practice of such activities without the aid of tools; (2) It is possible and desirable to construct useful physical tools which enable us simultaneously to retain different structures or 'maps' of educational phenomena before us. Such tools enable us both to perceive complex instructional relationships and to engage with increased clarity and precision in the use of our language as we reach out to one another in a community of discourse regarding claims about what **ought** to be done to improve instructional practice; and   (3) Change is a natural, endemic and pervasive characteristic of our world, including schools and classrooms, hence one which we need constantly to confront with tools which will enable us to retain clear mental images, or 'maps', if we are to make the sorts of decisions which are likely to improve the quality of schooling we provide our young people.

Tools

As we consider our images of schooling and classroom instruction it would be well for us to keep in mind the words of John Passmore who has argued that there is "... a familiar logical point to be made about teaching: it is a triadic relation. For all X, if X teaches, there must exist somebody who, and something that, is taught by X. (This is true whether 'teaching' means 'tries to teach' or 'succeeds in teaching'). A slightly less familiar point, perhaps, is that teaching is a *covert* **TRIADIC** (emphasis mine) relation as opposed to an *overt* triadic relation,....."[5]

Maxine Greene supports Passmore's point when she says that "In most instances, there is an assumption that teaching may be described as a "covert triadic relation" (here she refers to Passmore, above, p. 22). "This means that", Greene continues, "if anyone teaches, there 'must be'

something he teaches and someone he teaches it to, even when these are not mentioned. Passmore," she claims, "calls the triadic nature of the activity "covert" because it is often overlooked and because it is not always apparent in the "grammar of our language."[6]

Based on the insights of such thinkers we shall construct our tools for examining school classroom environments on a triadic base.

Tool No. I: Let us designate our first image of schooling, the dominant triad, by the label **discipline-centered schooling; DCS,** for short. A conservative paradigm of instruction, reflecting the powerful societal expectations imposed on teachers and schools, this triad is based on the following fundamental assumption.

Basic Assumption

DCS assumes that the purpose of the school is to train students in those disciplines of knowledge, those subject matters, those skills and values which have a direct connection to the needs of the society. The needs of the society become the needs of the students in this vision of school schooling. They represent what the state considers most important for its continued viability, along with its power to dominate the thinking of those who administer or teacher in our public schools .

DCS Triad

The essential components of the DCS triad are revealed both by the physical model of DCS which will now be shown and used hereafter in our discussion, and by the drawing below.
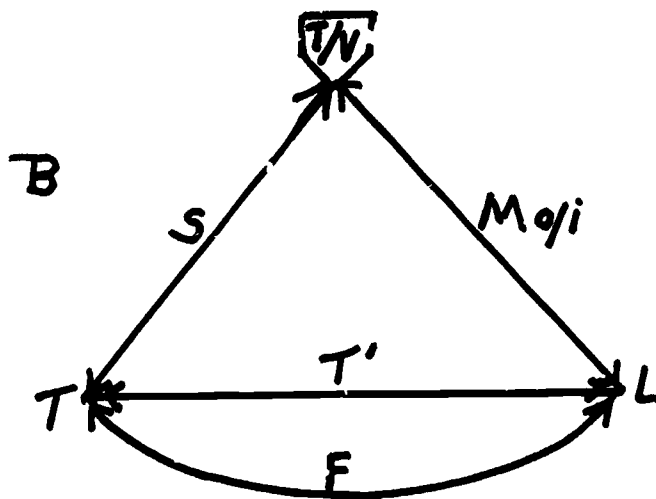
Symbols

T - teacher
T'- transmitter
L - learner
F - feedback
S - structure
B - bank of disciplines
Moi - method, organization, instruction
T/V - truth, value
    - imagry of certainty
Ns - Needs, society

Discourse

This tool for examining schools and classroom instructional environments claims that T is viewed as a 'guide', responsible for selecting S from B, for selecting appropriate Moi which will effectively T' S to L. Knowledge of how effectively T' is occuring is acquired by F, continuous and formative; formal and summative. Decisions about the needs of L and the choice of S by T are controlled to a large extent by Ns which it is the responsibility of the state to determine. This paradigm is a clear example of 'top-down' decision-making. L is viewed as the receiver of learning from T and T is viewed as a manager of environments in which effective T' ,that is, delivery of services, takes place.

Tool No. 2: Let us designate our second image of schooling by the label **empirical-naturalistic schooling; ENS,** for short. Representing a more liberal, social/corporate/cooperative-personal paradigmatic structure, this triad is based on the following fundamental assumption.

Basic Assumption

ENS assumes that the classroom is to be organized as a community of persons in which students are to acquire knowledges, dispositions and skills related to a liberal, participative democracy, in which this community is perceived as a cooperative entity, a family of persons which can grow and develop just as individuals can; which will at the same time nurture the growth and development of each of its members.

ENS Triad

The essential components of the ENS triad are revealed both by the physical model of ENS which will now be shown and used hereafter in our discussion, and by the drawing below.
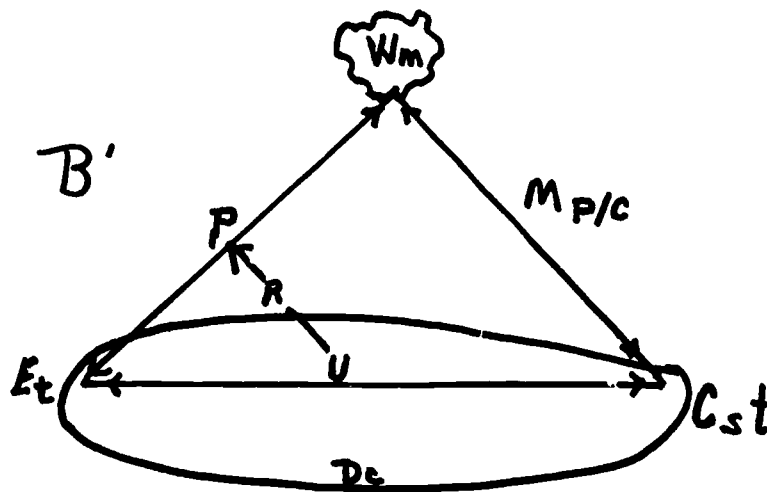
Symbols

E_t - environment, teacher
U - uncertainty
C_{st} - community, students, teacher
R - reflection
P - problem
B' - bank of disciplines, provide basis for subject matter
M_{pc} - method, project, core
W_m - warranted meaning
  - continual growth of imagry
Dc - democratic community
  - tensions created by larger democratic community , brought into schools and classrooms

Discourse

This image of instruction claims that the purpose of instruction is

to bring about the development of reflective thought in students, and that such powers will emerge out of collective decision-making by Cst about significant U confronting the classroom 'Cst'. In this triad t is viewed simultaneously as responsible for arranging the learning environment and as a facilitator, or as what Joyce, and more recently, Adler, have referred to as a 'coach'. These U are transformed into P via the process of R. The organized disciplines of knowing and valuing, B, provide the material out of which subject matter is drawn as it is needed in order to enable Cst to carry on its collective as well as its individual learning. ENS makes the claim that work in classrooms with the real life P of students, rather than with the inert, static content of the formal disciplines as it is revealed in ordinary textbooks, will generate a far broader and deeper measure of learning than would ordinarily take place. Many years ago a leading advocate of this vision of schooling, William Heard Kilpatrick, argued that "The plan of teaching subject matter as it is needed seems, if reasonably directed, to promise not less, but more and better learning of both skill and knowledge."[7]

Tool No. 3: Let us designate our third image of schooling by the label **great works schooling; GWS,** for short. Representing an image of schooling which recognizes the transcendent, universal, oneness of human beings wherever they are found, the common humanity which connects humans to humans, with the clear implication that human needs as opposed to human wants are the same wherever human beings are found, this triadic tool is based on the following fundamental assumption.

Basic Assumption

GWS assumes that human nature is the same everywhere, regardless of the geographic, political, social, economic, religious environment in which humans live. An analogy may help to make this assumption clear. Consider a tulip bulb planted somewhere in the Sudan, somewhere in the Soviet Union, somewhere in Japan, somewhere in Australia, somewhere in New York State. Each of the tulips which annually emerge from these bulbs, regardless of where their growth occurs, would produce a similar floral appearance. Their basic nature, in other words, is the same everywhere. So, too, with humans. Because human nature is the same everywhere, the natural needs of humans are everywhere the same.

GWS triad

The essential components of the GWS triad are revealed both by the physical model of GWS which will now be shown and used hereafter in our discussion, and by the drawing below.
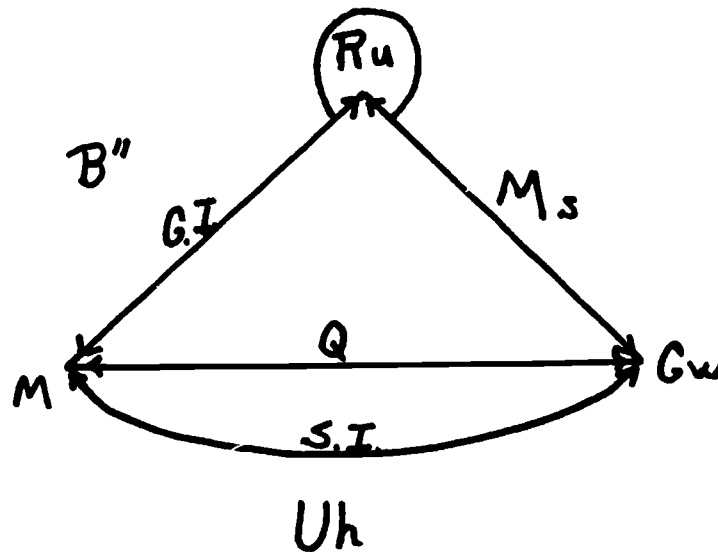
Symbols

M - mentor (by some, 'tutor')
Q - question, open-ended
Gw - great work, usually, though not necessarily, a book
SI - shared inquiry
GI - great idea
Ms - method, seminar
Ru - right understanding
B" - bank, consists of great works, usually, though not necessarily, books
    - image, universality of knowing and valuing
Uh - universal human nature

Discourse

Uh is composed of matter which contains **natural** potentiality, just as all other matter in the universe contains natural potentiality. This

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potential reveals itself, for instance, in the natural tendency of human beings intellectually to grow, to become, to know. Functioning in a maieutic capacity, as a midwife between Uh and Gw, M has the responsibility for shaping a significant Q, one which generates the need for critical interpretation, based upon the material derived from examining the Gw under consideration. Students in Ms engage in SI as they develop their interprtations of the Gw in light of the Q which has been developed by M. Interpretations by students must be based upon their understanding of the material in the Gw, and it is on the basis of this reasoning that a Ru of the GI will be pursued. The GI in this triad, in effect, constitutes the problem with which the students are confronted. The Gw are stored in B, and it is the dual responsibility of M to make decisions about those GI that are to be inquired into by the the students in Ms and to make judgments about the Ru which emerges from SI.

Ought Question

The ought question pertains to the normative problem confronting all who would like to consider themselves professional teachers or administrators. Essentially this question consists of four subordinate questions, with an additional query necessary to claify unique terms used throughout the normative process.

These four questions are:

I. What are the **ends**, the purposes, the goals toward which our instructional practice, our school environments are directed?

2. What are the **reasons**, the arguments, synthetic (empirical), analytic (definitional), logical (self-evident) which justify the pursuit of these ends?

3. What are the **means,** the methods or strategies which are most appropriate for pursuing these ends?

4. What are the **reasons,** the arguments, which justify the use of these means as ways of pursuing these ends?

5. What are the definitions of any unique terms employed during the normative process?

Sample Claims in Response to the Normative Questions Tool No. 1

1. **End:** The school **ought** to transmit fundamental knowledge to the student.

2. **Reason:** There is a core body of knowledge in our culture which represents the most important knowledge available and which needs to be known by all students.

3. **Means:** The teachers and administrators in the school are the persons who **ought** to decide what the best means are for teaching this fundamental knowledge to students.

4. **Reason:** Competent teachers and administrators know and have ready access to a variety of organizational and instructional methods, techniques, or tactics for guiding students in the pursuit of this fundamental knowledge.

Sample Claims in Response to the Normative Questions Tool No. 2

1. **End:** The school **ought** to foster the acquisition of knowledges, values and skills related to living in a liberal, participative democratic society.

2. **Reason:** Because our culture is based upon the principles of a participative, democratic social order, students need to develop their ability to confront squarely and courageously significant social indetermanancies, come to grips with the stark reality of our society, and understand how they can establish transformative connections with that society in ways which will bring

about an improved society both for themselves and for others.

3. **Means:** Teachers and administrators **ought** to be alert to significant social issues which could be used to transform the energies of students in ways which would naturally induce them to acquire much comprehension of knowleddge, value and skill as they pursued the problems which would be likely to emerge from their transformative endeavors.

4. **Reason:** Students acquire the intellectual, moral and behavioral capcities related to a liberal democracy best when they are actively and collectively involved with other students and teachers in the dual decision-making process of determining the problems they are going to pursue and how they are going to pursue them..

Sample Claims in Response to the Normative Questions Tool No.3

1. **End:** Schools everywhere **ought** to transform the inherent potentialities found in human nature into fully functioning, fully developing human beings.

2. **Reason:** Because all human beings have the same basic nature; that is, they are comprised of the same organic and intellectual needs, the ends pursued by schools everywhere, regardless of geographic or economic conditions, must be the same for all human beings.

3. **Means:** Because students have a natural potential, a natural desire to know, teachers and administrators **ought** to organize schools and instructional environments in seminars which stress cooperative, shared inquiry and which respect and nurture this natural penchant for intellectual growth.

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4. **Reason:** Two sorts of potencies can be identified, passive and active. A pile of lumber would possess passive potency; it has the potential to burn, but lacks the ability (ordinarily) to start itself burning. Humans possess active potency; they have the inherent tendency to initiate action from within. This means that, as Maritain said many years ago, "The chief task of education is above all to shape man, or to guide the evolving dynamism through which man forms himself as a man."[8]

Educational Change

While educational change, usually incremental, goes on about us constantly, the question of systematically intervening in our schools for the purpose of **deliberately** instituting change, requires that we possess a set of tools which we can employ in making increasing good judgments about our educational purposes and about the alternative ways in which we can pursue these purposes.

It is the contention of this paper that the physical models developed in conjunction with it constitute the tools necessary, though not sufficient, to engage in a rational consideration of alternative sorts of changes in our schools which might be pursued if we are to improve them in particular ways. Used as guides, as with any standard instrument, they can provide us with a constant reminder of the essential elements within each vision of schooling and instructional practice.

For those of us inclined to want to raise the question of which of the three is best, we are destined, on one hand, to be disappointed. As Dewey so presciently pointed out years ago, "since the practice of progressive education (ENS) differs from that of the traditional (DCS) schools, it would be absurd to suppose that the intellectual formulation and organization which fits one type will hold for the other. To be genuine, the science which springs from schools of the older and traditional type, must work upon that foundation. ... In the degree in which progressive schools mark a departure in their emphasis from old standards, as they do in freedom, individuality, activity, and a cooperative social medium the

intellectual organization, the body of facts and principles which they may contribute must of necessity be different."[9] The quality and effectiveness of reasoning with each of the tools we have constructed can only be assessed by the criteria appropriate to the image represented by that tool. We cannot, in other words, say one image is superior to the other as a design for changing and improving our schools.

Are we unable then to move forward in our quest for an improved educational practice? On the surface we appear to face a somewhat hopeless task. In such circumstances because, as humans we are condemned to choose, like it or not, we are likely to find ourselves controlled by those with political power. Because of the alienation which often accompanies the wielding of such power, this can never be a satisfactory means of making our judgments. But I am not so skeptical that I believe this is our only resort. It does seem to me that we might employ what one writer recently has referred to as "communities of discussion,"[10] what I would call "communities of discourse." Such communities would represent persons with persuasions that are revealed by each of the structures we have examined. They would share: "background assumptions concerning (I) what kinds of things might exist or are possibile in the community's real world - ... (2) generalizations about what characteristics and behavior patterns these 'things' might manifest - what these things are like and how they should behave ... under the various possible conditions... procedures of reasoning: (3) for detrmining what are the facts of the problem or question at hand ... where to look for information and how to extract that information in order to understand the spcific problems and questions before them;... and (4) procedures for analyzing the facts ... and for drawing conclusions ...."[11]

One value of our three tools then is that they provide us with the power to ask good questions,to understand the intentions, the meanings each associates with our commonly used languages and the grammar which we use when we employ this language. By considering taken-for-granted meanings and assumptions employed by those with a strong persuasion toward one or the other of the structures we can gain valuable insights into how the other views schooling. This, in turn, can lead to a larger measure of mutual understanding, out of which it might be possible to construct a common set of standards for shaping decisions to change our schools and classrooms. These decisions would reveal purposes to which the parties to the discourse would be mutually committed. These would

be separate from each of the particular views represented by the tools developed in this paper. These purposes would be external standards which would become the means by which judgments regarding the nature of a change to make and the effectiveness of any strategies which might be pursued to achieve the purposes projected by the change can be evaluated.

By way of a start, let met identify a few of these languages and suggest the different ways in which they are viewed by each of the visions of schooling and instructional practice represented by our tools.

Languages	DCS	ENS	GWS
children	subordinate	co-equals, community	co-equal
teacher	dominant	co-equal, community	Great works
subject matter	determined	related to living	Derived from Great Works
problems	assigned	emerge from social experience become standards	Great ideas
purpose of school	core knowledge core values	critical, reflective powers	rational, interpretive powers
society	needs very important	social contraditions, issues important for generating reflective capacities	critical, interpretive powers derived from Gw most important
career	skills, knowledge essential	comprehending interrelation-ships between work-culture	humanhood important, not work or career

Summary

Restructuring our schools, collectively negotiating meaningful participation in decision-making, creation of a state board of teaching, creating a licensed profession, increased success of recruitment of minority teachers, adding additional days to the school calendar, requiring a larger measure of liberal arts knowledge by prospective teachers, use of mentors as master teachers who would guide the novice

teachers into the profession, all are changes which we have been advocated by various task forces[12], organizations[13], and individuals[14] during the past twelve months. There may be merit in each of these proposals, but they fail to direct our attention to what it is specifically that we ought to change in our schools and practices which will be directly related to the improvement of the outcomes of schooling. Until we come to grips with the fact that there are quite different visions, designs for instructional practice, keach with with quite different purposes, we shall be involved in a hit and miss strategy regarding the improvement of our schools. Clearly perceiving the essential attributes of three quite different designs for schooling, understanding how these designs for schools and instructional environments can guide and discipline the process of normative thinking, comprehending the significance of the languages and the grammar employed by these designs, and possessing the **TOOLS** required simultaneously to keep each of these designs in our minds has been the purpose of this paper.

What we must remember is that we cannot assess these designs by comparing them with one another. That would be as fruitless as comparing an apple and an orange. If we are seriously interested in changing our schools and adopting policies which we firmly believe will bring about an improvement over what has been, then it is vital that we establish communities of discourse, communities which would encourage us to examine different school designs and which would enable us construct school and classroom environments connected to the ends upon which we have mutually agreed. The **TOOLS** revealed during the presentation of this paper could be of some real value in the development of such mutuality.

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