Montclair State University



Montclair State University Digital Commons

Thinking: The Journal of Philosophy for Children

IAPC Scholarship

2003

Volume 16, No. 4

Follow this and additional works at: https://digitalcommons.montclair.edu/ thinking_journal_philosophy_children



Part of the Social and Philosophical Foundations of Education Commons

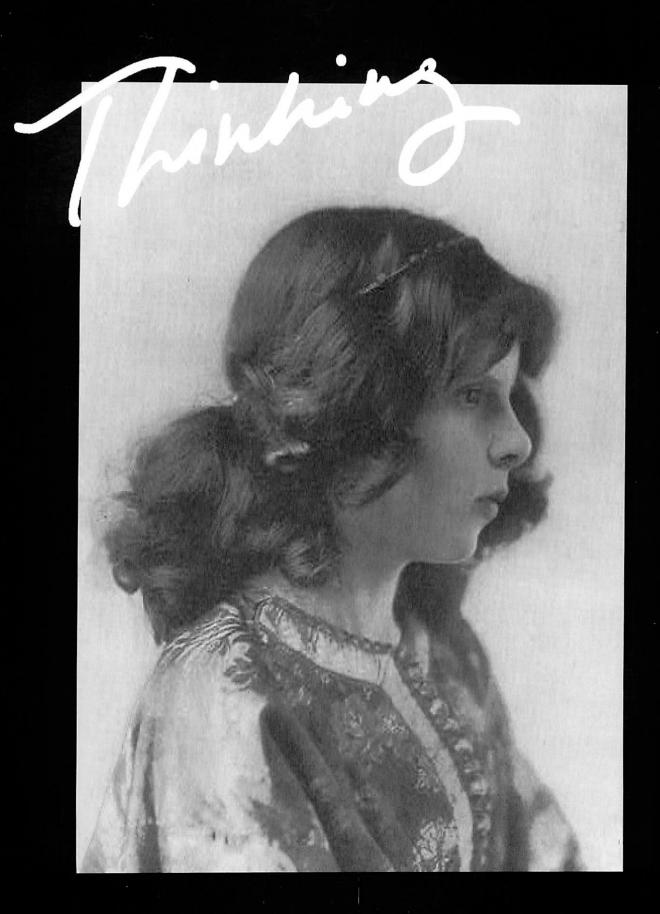
MSU Digital Commons Citation

"Volume 16, No. 4" (2003). Thinking: The Journal of Philosophy for Children. 25. https://digitalcommons.montclair.edu/thinking_journal_philosophy_children/25

This Journal is brought to you for free and open access by the IAPC Scholarship at Montclair State University Digital Commons. It has been accepted for inclusion in Thinking: The Journal of Philosophy for Children by an authorized administrator of Montclair State University Digital Commons. For more information, please contact digitalcommons@montclair.edu.



VOLUME 16 NUMBER 4 THE JOURNAL OF PHILOSOPHY FOR CHILREN





Volume 16, Number 4

Publisher

Joanne Matkowski

Thinking is published by the Institute for the Advancement of Philosophy for Children, a nonprofit institute that is devoted to educational purposes and is part of Montclair State University.

Editorial Staff

Editor

David Kennedy

Associate Professor of Education

Montclair State University

Editorial Assistant & Producer

Nathan Brubaker

IAPC

Montclair State University

Editorial Advisor

Matthew Lipman,

Professor of Philosophy

Distinguished University Scholar

Montclair State University, and Founder, IAPC

Contributing Editor

Gareth B. Matthews

Professor of Philosophy

University of Massachusetts at Amherst

Editorial Review Board

Philip Cam, Australia

Antonio Cosentino, Italy

Eugenio Echeverria, Mexico

Jen Glaser, Israel

Walter Kohan, Brazil

Pavel Lushyn, Ukraine

Felix Garcia Moriyon, Spain

Contents copyright 2003 The Institute for the Advancement of Philosophy for Children All rights reserved. ISSN No. 0190-3330

Institutional subscription (yearly, 4 issues)

\$70.00 (USA) includes shipping

\$85.00 (Foreign) includes shipping

Individual subscriptions (yearly, 4 issues)

\$45.00 (USA) \$60.00 (Foreign)

Subscription requests and related correspondence

may be addressed to:

IAPC

Montclair State University

Upper Montclair, NJ 07043

Phone: 973-655-4277

Fax: 973-655-7834

E-mail: matkowskij@mail.montclair.edu

Manuscripts and related correspondence should be

addressed to the Editor, Thinking,

IAPC, Montclair State University Upper Montclair, NJ

Phone: 973-655-4277

E-mail: kennedyd@mail.montclair.edu

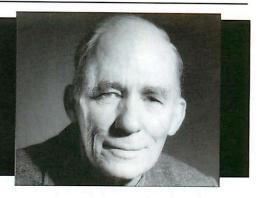
Table of Contents

Thinking in Stories
Gareth B. Matthews, review of Sara Swan Miller, Three Stories You Can
Read to Your Cat
Research in Philosophy for Children
Michael Schleifer, Marie-France Daniel, Emmanuelle Peyronnet & Sarah Lecomte, The Impact of Philosophical Discussions on Moral Autonomy, Judgment, Empathy and the Recognition of Emotion in Five Year Olds
Philosophy for Children & Pierce Studies Lee, Ji-Aeh, The Triadic Relationship in Thinking for Oneself
Adults & Children, Children & Adults
John Colbeck, Children Under Power: Philosophers as Children22
Oscar Brenifer, How to Avoid Children's Questions29
Notes From the Field
David Kennedy, Card Games, Roughhousing, Traffic Jams &
Thunderstorms
Philosophy for Children & Curriculum Development
Manuela Gomez & Irene de Puig, Ecodialogo, Environmental Education
and Philosophical Dialogue
Tock Keng Lim, Introducing Asian Philosophy and Concepts Into the
Community of Inquiry41
Community of Inquiry & the Language of Science
Lisa Novemsky, Using a Community of Inquiry for Science Learning, or
the Story of ' <i>It</i> '

Picture Credits

Cover: Library of Congress. Page 19: A Children Coloring Book. Page 21: A Samoyed Shaman beating his drum, and dancer. New Laronsse Encyclopedia of Mythology, London, Hamlin, 1968. Page 28: Illustrations from a book of magic. Batak, Sumatra. Page 36: From original manuscript of Peter Rabbit. Page 40: Figures from "Ship of the Dead" portrayal. Dayak, Borneo. Pages 42-43: Armless humans (42) and trees with Mandala formation. From Rhoda Kellogg, Analyzing Children's Art, Palo Alto: Mayfield, 1969, pp. 128 and 131. Page 46: Polish folk art. Page 47: Bird portrayal on a bronze kettledrum. Tonkin, Southeast Asia. Page 49: Illustration from a book of magic. Batak, Sumatra.

by Gareth B. Matthews



Sara Swan Miller, Three Stories You Can Read to Your Cat, illustrated by True Kelley, Boston, Houghton Mifflin, 1997

our friend went out the front door saying, "I'm going out, Kitty. Now be good. Don't do anything bad while I am gone." In a picture we can see a little bit of "your friend" as she went out the door.

"Why would I want to do anything bad?" you asked yourself. "Bad things are not good." Your friend was being silly.

You looked around the room for something good to do. You spotted the curtain. "Climbing is always fun," you said to yourself. "And fun is good!" You stuck out your strong claws and began to climb the curtain. In fact, you kept climbing the curtain until it was in shreds.

"Hmmm," you said to yourself. "There are too many holes in this curtain now. But it was very good while it lasted!"

Your adventures continued. You spotted a plant on the windowsill. You nibbled a leaf and found that it tasted very good. So you nibbled all the green tips.

You turned your attention to the rug. "Cleaning my claws is always a good thing to do," you said to yourself. You sank your claws into the rug. You clawed and clawed the rug until it began to look shabby.

"Ah," you said to yourself. "That was very, very, very good."

Next you knocked a bowl off the table. It shattered into tiny pieces. Then you prowled around the kitchen and smelled the garbage can. You knocked the lid off and burrowed into the garbage in search of what was making such a good smell. You dug all the way to the bottom. The source of the smell was a wonderful piece of chicken.

"Mmmmm," you said as you munched and crunched the chicken, "That was the best thing I have done all day!"

Doing all those good things made you very sleepy. You crept back into the living room, jumped onto the couch, and curled yourself into a ball. "What a good day I have had today!" you said to yourself. "My friend will be happy. I did not do one bad thing!"

You went to sleep.

Stories You Can Read Your Cat." I recently read and discussed it with a group of four and five-year-olds. I wanted to learn something about their ability to cope with philosophical irony. In my discussion with these young kids, Julian, aged four, smiled broadly as he said, "The cat did bad things, [but] he thought that it was good."

Henry, also four, added, "And it was a mess."

"Did [the cat] think the mess was good?" I asked.

"Yes," replied Henry; "the cat didn't know he did bad things."

The interpretation of the story that these children came up with is a good one, but it is not our only option. One could understand the cat's antics as "revenge behavior" getting back at his "friend" for leaving him alone. Then the cat's saying that destroying curtains or turning over the garbage can was "good," even "very good," would count as sarcasm. As it turns out, however, supposing that the cat is sincere in calling what he does "good" makes the story philosophically more interesting.

Ellen Winner, in her book, The Point of Words (Harvard, 1988), maintains that preschoolers are unable to understand irony, particularly the irony of sarcasm. Whether or not Winner is right about children and sarcasm, the preschoolers to whom I read the cat story showed by the grins on their faces, and the acuity of their comments, that they can appreciate philosophical irony. Thus they realized that what the cat did was, according to the cat, good, even though we, the audience, know that it was bad. What makes the discrepancy between the cat's judgment and our own judgment philosophical is the problematic nature of what is required for something to be good.

In some respects such philosophical irony is like dramatic irony, where the audience knows something the character on stage does not know. What makes irony in a play dramatic is the fateful consequence of the character's ignorance. What makes the cat's ignorance philosophical is the stimulus it provides for us to try to clarify, perhaps in discussion, the difficult question of what makes an action good or bad.

Gareth B. Matthews

This story, "The Good Day," is the third of the "Three

The Impact of Philosophical Discussions on Moral Autonomy, Judgment, Empathy and the Recognition of Emotion in Five Year Olds

MICHAEL SCHLEIFER, MARIE-FRANCE DANIEL, EMMANUELLE PEYRONNET & SARAH LECOMTE

Background

f children talk about the torn wings of a butterfly (see Appendix A), can violence eventually be reduced? It's a huge leap. But it's a leap that a number of us want to make. The present set of results are part of a larger project entitled "Philosophy for Children and Prevention of violence". The spiritual godparents of the movement, Matthew Lipman and Ann Sharp, began the teaching of philosophy to children more than 30 years ago. "Philosophy", for them as for us, is not trying to cram young minds full of Immanuel Kant's "Critique of Pure Reason", as some have sometimes incorrectly supposed. It means using specially written stories, involving lots of dialogue, to get children thinking critically about the world. The novelettes and teaching guides from the core curriculum, which cover most fundamental philosophical controversies, are particularly important to us in Quebec in regard to simulating discussion about moral issues and concepts and help to develop moral and logical reasoning, judgment, and self-esteem (Schleifer, Lebuis and Caron, 1987; Schleifer, Daniel, Lafortune and Pallascio, 1999). In recent years, the set of basic readings has been supplemented by others which relate more specifically to mathematical and scientific concepts (Daniel and Pallascio, 1997; Lafortune, Daniel, Pallascio and Schleifer, 1999).

The present study made use of newly created stories which incorporate specific notions of non-violence into the philosophical discussions. The collection entitled "Les Contes d'Audrey-Anne" (the English version is called "Audrey-Anne's Tales") was created by my colleague Marie-France Daniel. By thinking about that wounded butterfly, for instance (see Appendix A), children can begin to explore ideas about power, fragility, injury, illness, and the nature of living beings. They can start to compare, for example, the similarities and differences between tearing a butterfly, tearing a piece of paper, and tearing a favorite doll or teddybear. They can also make analogies, distinguish concepts, and begin to understand, explain, and justify their emotions.

The present study attempted to ascertain whether exposure to these philosophical discussions over the course of a year would have an impact on moral autonomy, judgment, empathy, and emotion-recognition of 5-year old children.

Subjects

39 children in 3 schools (Kindergarten) in a Montreal area constituted the experimental group. Children had a philosophy session once a week for about an hour which were led by a teacher trained and supervised by the first two authors of the present paper. Sessions followed the usual format of P₄C including reading the episode of the novel (since the children were very young, the teacher read to them), fol-

Michael Schleifer (schleifer.michael@uqam.ca) of Université du Québec à Montréal and Marie-France Daniel of Université de Montréal have been working with Philosophy for Children for many years. They have published in Education, Philosophy, and Psychology Journals, and are presently involved in a project on the development and education of the emotions. Emmanuelle Perronet is a European collaborator, and Sarah Lecompte a doctoral student in psychology at UQAM.

lowed by questions suggested by the children for discussion.

The control group consisted of 42 children in kindergarten classes in the same 3 schools. There were 43 girls and 38 boys in the study who completed all phases of the research.

The 3 schools represented a relatively privileged socioeconomic area, one low socio-economic area (with many recent immigrants) and one average area.

Instruments

Four instruments were used in this research, examining moral autonomy, judgment, empathy, and the recognition of emotion.

"Moral autonomy" was measured by the test developed by Saltzstein (1994). Children are presented with a number of moral dilemmas (see Appendix B), and choose what they would do. They then are subjected to probing, with the opposite point of view presented by the experimenter. The degree of moral autonomy is measured by the ability of the child to retain his initial choice, although considering the other viewpoint. A score of 1 is given for immediately changing one's response to match that of the adult. An intermediate score of 2 is for the child who retains his choice, despite probing. The autonomous score (3) is for retaining the choice, although considering the arguments of the other possible choice.

Judgment was measured by a test developed by Schleifer (1992) based on the consensus definition (Giroux, 1990; Schleifer, 1992; Lipman, 1992A, 1992B; Lipman, 1995; Bruneau, 1996; Bailin, Case, Coombs and Daniels, 1999A, 1999B) which sees judgment as "the consideration of like and unlike situations and relationships". Judging essentially involves looking at differences and similarities where these are not obvious.

This test was adapted for this study (see Appendix C) to measure the child's capacity to see similarities and differences where the content refers to forms of conflict and violence, as well as distinctions between the animate and the inanimate. Children were given two practice items to play the game: "Which is not the same as the others?" There were 4 items (see Appendix C) which were scored as follows:

Wrong response or "I don't know" = 1.

Correct response, but without justification= 2 (these could of course been by chance).

Correct response with correct justification= 3.

If the child made use of, or mentioned the criteria of living vs. non-living (for Items 1 to 3), or equal fight vs. non-equal one (or sport vs. bullying or dominating) (for Item 4), these constituted the highest level of response (score of 3).

The measure of empathy was Selman's dilemma (Selman, 1971; Selman and Byrne, 1974, see Appendix D)

which poses the problem of whether or not to buy a dog for a friend whose dog has recently died. The ratings range from 1 to 4, although the fourth level is not relevant for 5 year olds.

Score of 1: Egocentric response.

Score of 2: Response based on information.

Score of 3: Response based on information and feeling.

Score of 4: Mutual regard. This last is the ability to consider the viewpoint of the other, while anticipating how he might consider your viewpoint, which could, in turn, affect his feelings and so on (see Appendix D and Appendix E).

The emotion-recognition test was based on Freeman's work (1984). Two short story vignettes were written for each of four emotions: happiness, sadness, fear and anger (see Appendix F and Appendix G). The children were shown the same picture for each story. The facial expression was judged neutral by 3 independent raters. After each vignette, the child was asked: "How does the child in the story feel?" The responses are rated as follows:

Score of 1: complete confusion of emotion or "I don't know".

Score of 2: generally correct emotion, at least on a positive-negative dimension.

Score of 3: the correct specific emotion appropriate for that story.

Following Freeman's suggestion, based on her finding that gender and racial similarity/ difference can have an effect on response, children were shown a picture of a child of a different gender and differing also by "racial group." Thus, a Black girl would see a White boy (4 stories) or an Asiatic boy (4 stories), and a White boy would see a Black girl (4 stories) or an Asiatic girl (4 stories).

Procedure

The four tests described above were administered in October (pretests) and then again in April of the next year (post-tests) to all the children in the 3 schools, and in both experimental and control groups. Four different research assistants, ignorant of the main purpose of the study, were trained in the administration and scoring of the tests. All the scores were examined by two other assistants with the help of the transcribed audio and video tapes. Inter-judge agreement was very high (99%) and the few doubtful cases were decided by the entire team. For all tests, the lower score was given rather than the higher one, to resolve the few remaining disagreements.

Analysis

The results were subjected to a 2 x 2 analysis of variance with group (P₄C versus control) and time (pre-test versus post-test) as variables. Results were also examined in

regard to gender and school context (3 schools). Each of the four dependent variables (moral autonomy, judgment, empathy, and emotion-recognition) was examined separately. In addition, each of the four judgment items (see Appendix C) as well as each of the four emotions (see Appendices F and G) was also analyzed individually.

In addition to the quantitative analyses, we are also undertaking an examination of each child's qualitative progress for each of the tests. This will allow us to check results from the aspects of the study presented in this paper with other dimensions not here reported. These include conceptions of violence and body representations (see Daniel, Schleifer, Garnier and Peyronnet, 2003).

Results

There were no significant gender differences for any of the dependant variables. Therefore, the results are reported for the entire group of children, boys and girls together.

MORAL AUTONOMY showed significant progress for both groups (F = 7.5; p < .001, see Table 1) from pre-test to post-test. There was no significant difference, however, between the experimental and the control group (F = 4.5; p > .05, see Table 1).

The results on EMPATHY also showed significant change over time (F = 7.5; p < .001, see Table 4) as well as a significant interaction effect (F = 7.6; p < .001, see Table 4). The P_4C group improved more significantly than the control group, which in fact were somewhat lower on posttest.

JUDGMENT showed highly significant change over time (F = 51.05; p < .0001, see Table 2) but no difference between groups (F = .68; p > .05, see Table 2). There were significantly fewer "don't know" responses for both experimental and control-groups on the post-test (5 in total) compared with the pre-test results (22).

Judgment item no 4 (see Table 3) on VIOLENCE showed a highly significant interaction effect (F = 7.2; p < .0001, see Table 3) in addition to the significant main effect (F = 5.8; p < .01, see Table 3). The P₄C group improved significantly more on this item than the control group.

The EMOTION-RECOGNITION test showed a significant improvement over time (F = 37.6; p < .0001, see Table 5). Although the experimental group did not differ significantly from the control group (F = .10; p > .75, see Table 5), there was a significant school by group interaction effect (F = 58; p < .001, see Table 5). Examination of the means (see Table 5) shows that the P_4C group improved significantly as compared to the control group in 2 of the 3 schools. There were fewer "don't know" responses on post-testing (N = 3) than on pre-testing (N = 13).

Although a large number of children still confuse anger, sadness, and fear (even in the post-test), the individual protocols did not reveal many instances of the kind of effect of gender or racial difference found by Freeman in her study. A few children (N = 5) did refer to the fact that the

child was Black or Asiatic, and used specific characteristics (slanted eyes, big lips) to determine their emotion-choice. The great majority of children, however, attended to the stories, without any explicit mention of, or apparent focus on, gender or race.

Discussion

All of the four instruments, including Saltzstein's "moral autonomy" measure and Selman's "empathy" instrument, proved sufficiently sensitive to pick up differences, either between groups, or over time. The present study was limited, of course, to looking at changes only after one year. Since both Selman's and Saltzstein's measures show the greatest changes over a greater length of time (the crucial period is between 5 and 9 year of age, see Selman, 1971; Selman and Byrne, 1974; Saltzstein, 1984), it is interesting that progress was noted even after a relatively short period.

The "judgment" measure showed significant progress over time for both groups, and seems to be a good indicator of the growing capacity of children at this age (5 to 6 years old) to make use of comparisons in ambiguous contexts of similarity and difference. The present results are also consistent with the findings and theories of Gelman and Spelke (1981) who see this age (5 years old) as a crucial one in the development of the animate-inanimate distinction among children. One of the most important results of the present study was that children exposed to philosophical discussions improved their ability to judge relevant differences about items concerning violence (see Item 4 in Appendix C). This is an excellent demonstration of the efficacy of Philosophy for Children. In the present study, we particularly aimed our emphasis on themes of living versus nonliving and forms of violence and abuse versus sports or physical activities between equals.

The results on "empathy" (perspective-taking) showed an improvement over time for both groups, and a more significant improvement for the experimental group. It seems reasonable to suppose that children learned to improve their perspective-taking in the philosophy discussions, since learning to listen to other's point of view is an important part of the "community of inquiry" approach.

The results on "emotion-recognition" show a significant change over time, and a significant difference according to group in 2 of the 3 schools (the one school which did not show improvement was the high socio-economic one where the initial scores were already relatively elevated). Thus, there does seem to have been an effect of the philosophical discussions on children ability to recognize specific emotions. Being able to talk about fear, anger, and sadness, recurrent themes in the material used, does allow more clarity in identifying these emotions in others. It is of interest to note, as well, that another measure of emotion (the ability to explain or define it) also progressed during the course of the year (Daniel, Schleifer, Garnier, Peyronnet, 2003). The significant decline in "don't know" responses for the experi-

mental group perhaps reveals the increasing confidence the children developed at talking about their emotions.

Despite the evidence of some progress concerning emotions-recognition, it is important to point out how limited this progress was. A large number of children continue to confuse anger, sadness, and fear, and a certain number even are mixed up about "happiness". Although as parents and teachers, we often take it for granted that children of 5 years old have gained a basic mastery of the primary emotions ("glad, mad and sad"), children (and many adults) display more confusion than is generally believed, not only about the range of nuanced emotions, like disgust (Widen and Russell, 2003) and longing (Holm, O., Claésson, V., Greaker, E., Karlsson, C., Strömberg, A., 2000; Holm, O., Greaker, E. & Strömberg, A., 2002), but even about the basic "primary" ones like happiness, fear, anger and sadness (Harris, Olthof and Terwogt, 1981; Hughes and Dunn, 2002).

Given the neglect of the emotions in education (even in moral education), much more work needs to be done on how children can be helped to learn about, identify and articulate their own, and other's emotions. A recent study by Pons, Harris and Doudin, 2002, shows that one can teach nine year-olds to better understand emotions. More research is needed on the impact of programs like Philosophy for Children, on both short-term learning, and long-term development of emotions, particularly with very young children. As Pons et al. (2002) demonstrated, there is an important development in children's comprehension and conceptualization of emotions between the ages of 6 and 11. In this regard, longitudinal studies are, of course, necessary. A variety of measures of the multi-faceted dimensions of emotions should be used. In addition to the measures used in this study - emotion-recognition and cognitive empathy and the dimension studied by Pons et al. (2002) and Daniel et al. (2003) – emotion comprehension –, other aspects such as the causes of emotions must also be separately examined (see for example, Denham and Zoller, 1990; Hugues and Dunn, 2002). The present study provides some indication that at least one of the aspects of emotions, namely emotion-recognition, can mature to some degree even in the period of one year. Furthermore, it seems that philosophical discussions played a role in helping this improvement.

References

- Bailin, S., Case, R., Coombs, J.R. and Daniels, L.B. 1999. "Common Misconceptions of Critical Thinking", *Journal of Curriculum Studies*, vol. 31, no 3, p. 269-283.
- Bailin, S., Case, R., Coombs, J.R. and Daniels, L.B. 1999. "Conceptualising Critical Thinking", *Journal of Curriculum Studies*, vol. 31, no 3, p. 285-302.
- Bruneau, S. 1996. Is there a political agenda behind critical thinking?. Paper presented at Canadian Society for the Study of Education, Brock University.
- Daniel, M.-F., Lafortune, L., Pallascio, R., Schleifer, M. (2000). "Communauté de recherche philosophique dans une classe du

- primaire. Étude des dynamiques de développement (pp. 155-181). In Pallascio, R. et Lafortune, L. (dir.). Pour une pensée réflexive en éducation. Québec : Les Presses de l'Université du Ouébec.
- Daniel, M.-F., Pallascio, R. (1997). "Community of inquiry and community of philosophical inquiry: conceptual analysis and application to the children's classroom". *Inquiry. The Journal of Critical Thinking*, vol. 17, no 1, pp. 51-67.
- Daniel, M.-F., Schleifer, M., Garnier, C. and Peyronnet, E. (2003). *Emotions and Philosophical Dialogue*. European Association for Research on Learning and Instruction (EARLI). 10th Biennial Conference, Padova, Italy – Août.
- Denham, S.A. and Zoller, D. (1990). "When My Hamster Died, I Cried": Preschoolers' Attributions of the Causes of Emotions. *Journal of Genetic Psychology*, vol. 152, no 3, pp. 371-373.
- Freeman, E.B. (1984). "The Development of Empathy in Young Children: In Search of a Definition". *Child Study Journal*, vol. 13, no 4, pp. 235-245.
- Gelman, R. and Spelke, E. (1981). "The Development of Thought about Animate and Inanimate Objects: Implications for Research in Social Cognition". In Flavel, J. and Ross, L. Social Cognition Research. Cambridge University Press.
- Giroux, A. 1990. "Enseigner à penser: passer de maître à mentor", Revue canadienne de l'éducation, vol. 15, no 3, p. 229-244.
- Harris, P.L., Olthof, T. and Terwogt, M.M. (1980). "Children's Knowledge of Emotion". *Journal of Child Psychology and Psy-chiatry*, vol. 22, no 3, pp. 247-261.
- Holm, O., Claésson, V., Greaker, E., Karlsson, C., Strömberg, A. (2000). "Experiences of Longing in Six-Year-Old Swedish Children". *The Journal of Psychology*, vol. 134, no 3, pp. 346-348.
- Holm, O., Greaker, E., Strömberg, A. (2002). "Experiences of Longing in Norwegian and Swedish 4- and 5- Year-Old Children". The Journal of Psychology, vol. 136, no 6, pp. 608-612.
- Hugues, C. and Dunn, J. (2002). "When I say a naughty word". A longitudinal study of young children's accounts of anger and sadness in themselves and close others. British Journal of Developmental Psychology, vol. 20, pp. 515-535.
- Lafortune, L., Daniel, M.-F., Pallascio, R., Schleifer, M. (1999). "Evolution of pupils' attitudes to mathematics' when using a philosophical approach". *Analytic Teaching*, vol. 20, no 1, pp. 33.45
- Lipman, M. 1992. "Judgment and Person", Montclair State University, New Jersey, conférence présentée à Graz, Autriche, 20 pages.
- Lipman, M. 1992. "L'éducation au jugement", dans La formation du jugement, ouvrage collectif sous la direction de Michael Schleifer. Montréal: Les Éditions Logiques, pp. 99-123.
- Lipman, M. 1995. À l'école de la pensée, traduit de l'anglais par Nicole Decostre. Bruxelles: De Boeck, coll. Pédagogies et développement (Originally Thinking in Education, 1991).
- Pons, F., Harris, P.L. and Doudin, P.A. (2002). "Teaching emotion understanding". *European Journal of Psychology of Education*, vol. 17, no 3, pp. 293-304.
- Saltzstein, H. (1994). The role of heteronomy in children's moral thinking. Society of Research in Child Development.
- Saltzstein, H., Weiner, A. Munk, J., Supraner, A., Blank, R., Schwarz, R. (1987). "Comparison between children's own moral judgments and those they attribute to adults". Merrill-Palmer Quarterly, vol. 33, no 1, pp. 33-51.
- Schleifer, M. 1992. La formation du jugement. Montréal: Éditions Logiques
- Schleifer, M., Daniel, M.-F., Lafortune, L., Pallascio, R. (1999). "Concepts of cooperation in the classroom ». *Païdeusis*, vol. 12, no 2, pp. 45-46.
- Schleifer, M., Lebuis, P. and Caron, A. (1987). The effect of the Pixie program on logical and moral reasoning. *Thinking*, *VII*(2), p. 12-

16.

Selman, R.L. (1971). "The relation of role taking to the development of moral judgment in children". *Child Development*, vol. 42, no 2, pp. 79-91.

Selman, R.L. and Byrne, D.F. (1974). "A Structural-Developmental Analysis of Levels of Role Taking in Middle Childhood". *Child Development*, vol. 45, pp. 803-806.

Widen, S.C. and Russell, J.A. (2003). "A Closer Look at Preschoolers' Freely Produced Labels for Facial Expressions". *Developmental Psychology*, vol. 39, no 1, pp. 114-128.

Table 1
Means for Moral Autonomy Measure

	PRE-TEST	POST-TEST	
Experimental	3.53	4.03	
Control	3.53	3.77	
School 1	3.61	3.93	
School 2	3.32	3.86	
School 3	3.5	3.96	

(see Appendix B)

Table 2
Means for Judgment Test

	PRE-TEST	POST-TEST	
Experimental	7.47	9.10	
Control	7.53	9.28	
School 1	7.49	9.47	
School 2	7.21	8.48	
School 3	7.91	9.75	

(see Appendix C)

Table 3Means for Item 4 – Violence

	PRE-TEST	POST-TEST	
Experimental	1.53	2.03	
Control	1.77	1.74	
School 1	1.08	1.93	
School 2	1.05	1.83	
School 3	1.64	1.92	

(see Appendix C) **Table 4**Means for Selman's Empathy Test

	PRE-TEST	POST-TEST
Experimental	1.26	1.77
Control	1.23	1.19
School 1	1.23	1.60
School 2	1.25	1.41
School 3	1.27	1.38

(see Appendix D)

Table 5
Means for Emotion-Recognition Test (see Appendices F and G)

	PRE-TEST	POST-TEST
Experimental	17.39	19.33
Control	17.00	19.02
School 1		
Experimental	16.50	20.83
Control	16.48	16.50
School 2		
Experimental	16.10	20.38
Control	16.90	18.20
School 3		
Experimental	19.73	20.28
Control	19.83	20.30

Appendix A Episode 3 – Audrey-Anne's Tales [Marie-France Daniel]

The Butterfly

Alexis and Audrey-Anne are on an outing with their school. They are chasing butterflies... Not for keeps! Not to kill them! Just to get a look at them up close.

An itty-bitty light yellow butterfly sets down on a flower close to Alexis' net. The butterfly seems comfortable on the flower's crown. The flower is dark yellow, almost orange.

Alexis wants to try and tame the butterfly. He whispers to it:

- Hello little butterfly. What is your name? How old are you? You are so tiny!

The little butterfly is afraid of being caught. It flies away. But it comes back. Once again, Alexis tries to tame it:

- My name is Alexis. I'm small, just like you. The butterfly doesn't answer. But its antennas are moving very fast. Alexis wonders:
- Do butterflies talk by moving their antennas? The butterfly's wings are moving too, but not so fast. Their movement is slow and regular. They look like tiny lace fans. Audrey-Anne and Alexis observe their movement. They start laughing. They feel happy.

All of a sudden, their eyes are attracted to a small detail: the butterfly's wings are not the same. One of them is torn. Audrey-Anne worries about this difference:

- Little butterfly, does your wing hurt? How did you tear your wing?

The little butterfly crosses its front legs and then explains a pout:

- Over here, the adult butterflies are mean. Alexis is surprised:
 - Oh really? Why?

The itty-bitty light yellow butterfly explains:

- Because an adult butterfly tore my wing. Alexis doesn't understand. He answers:

- My parents are adults and they're not mean.
- You're lucky! replies the little butterfly. But from his tone of voice, it doesn't seem to believe what Alexis is saying.

Alexis continues:

- No, no adult has ever hurt me... nor my friend Audrey-Anne.
- That's true, continues the yellow butterfly, I should have said that some adults are mean.

Audrey-Anne heard the whole conversation between Alexis and the little yellow butterfly. She is feeling sad. Big fat tears roll down her cheeks.

 This morning, my friend Jeanne pulled on my doll's arms, just because I wouldn't lend her my skip-rope. She pulled so hard that the arms came out.

Audrey-Anne turns towards the pretty light yellow butterfly and asks:

- What do you think of that? Do you think some children can also be mean?

Since the little butterfly doesn't answer, Audrey-Anne continues to explain:

- This morning, my doll cried.

Alexis butts in:

- Come on Audrey-Anne, dolls don't cry. Dolls aren't real people. Her name is Louiselle.

Audrey-Anne adds:

I cried when I saw my doll without arms.

Now, when I look at her, I don't recognize her. She isn't the same anymore!

Appendix B — Test Of Moral Autonomy [From Saltzstein, 1994]

Moral Dilemmas and Counter-Probes

1. (teasing story) All the kids are always making fun of Pat, who's a new kid in school. Chris is Pat's friend and feels sorry for him/her, and promises to back him/her up whatever s/he says. Pat is really upset and says, "I won a big prize at my other school." The other kids start laughing and they say to Chris, "Did Pat really win a prize, Chris?" Chris knows that Pat never won a prize at his/her old school.

What should Chris do? Why?

Weak probes:

If child says: keep promise-lie,

"What about the fact that Chris would be lying to the other kids?" (weak probe)

"But are you sure that Chris should lie to the other kids? Don't you think that Chris should tell the kids the truth?" followed by "But what about the fact that Chris is friends with the other kids, too?" followed by "But what about the fact that the other kids trust Chris?" (strong probes)

If child says: break promise-don't lie,

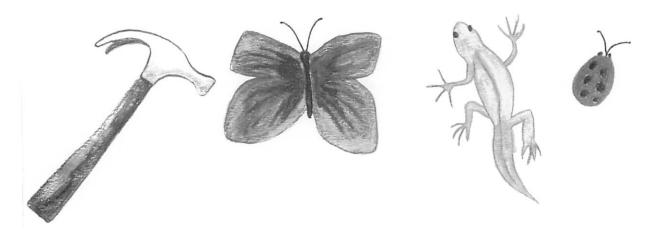
What about the fact that Chris promised to back up Pat? (weak probe)

"But are you sure that Chris should break his/her promise to Pat? Don't you think that Chris should keep his/her promise to back Pat up?" followed by "But what about the fact that Chris and Pat are friends?" "... Pat is being teased?" "... Pat trusts Chris?" (strong probes)

- 2. (cheating story) Nicki tells his/her best friend Shawn that s/he was afraid that s/he was going to fail the test that they just took in class and so s/he had to cheat on the test. Nicki asks Shawn not to tell anyone, and Shawn promises not to tell. The next day, the teacher suspects that Nicki cheated and asks shawn if Nicki cheated.
- 3. (hiding story) Gene tells his twin brother/her twin sister Alex about a secret hiding place that s/he has in the apartment, and asks him/her not to tell anyone. Alex promises not to tell anyone about Gene's secret hiding place. Later the same day, their parents haven't seen Gene and ask Alex if s/her knows where Gene is.

Appendix C — Test Of Judgment (Which Is Not Like The Other?)

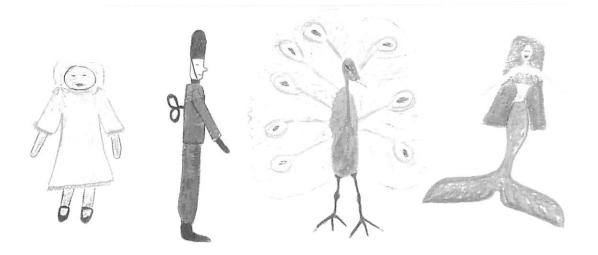
Item 1 – Hammer



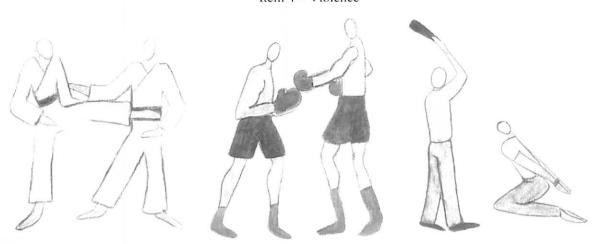
Item 2 – Horse



Item 3 – Peacock



Item 4 – Violence



Appendix D — Levels Of Empathy (Perspective Talking)

Perspective taking proceeds in levels. Studies of children from four years of age through young adulthood show that there is a sequence of levels through which individuals go in their understanding of the relationship between their own and other's points of view. Each level stems from the preceding level and paves the way for the next one. Children may go through the levels at different rates but always in the same order.

The child's approach to perspective taking changes as he moves through each level. These changes are illustrated by the following sample responses to this typical perspective-taking dilemma: A boy named Tom must decide whether to give his friend Mike a puppy for his birthday. Mike's own dog disappeared two weeks ago, and Mike is so sad that he says he never wants to see another dog.

- Level One: Egocentric perspective taking (about ages four to six). The child has difficulty distinguishing between his view and that of others. He reasons that his point of view is the true perspective, not because he is right and others are wrong, but because he is unaware that others may have a different perspective. He may say in response to the puppy dilemma, "Tom should give Mike a puppy. I like puppies. Puppies are fun." He does not consider the possibility that Mike may not want a puppy.
- Level Two: Informational perspective taking (about ages six to eight). The child sees himself and other people as having possibly different interpretations of the same social situation, depending upon how much information each has. However, he cannot put himself in another's place because he does not realize that another person can think about what he is thinking. A child at this level may re-

spond to the puppy story like this, "Mike said he doesn't want a puppy. Tom likes puppies, but he shouldn't get one for Mike."

- Level Three: Self-reflective perspective taking (about ages eight to ten). The child becomes aware that people think or feel differently from one another, not only because they have different information, but also because they have different values. The child can put himself in other people's shoes, and, in doing this, he can see himself through their eyes. He understands that one person can think about another's view. A child at this level may answer, "If I were Mike, I'd want a puppy. Maybe Mike just doesn't know how he would feel if he had a new dog."
- Level Four: Mutual perspective taking (about ages ten to twelve). The child realizes that both he and other people are thinking about each other's views at the same time. The child can view his own interactions with people as if he were a bystander. A child at the level of mutual perspective taking may say, "Well, if Tom gets Mike a puppy and Mike doesn't like it, Tom still knows Mike will understand that he was only trying to make him happy." At this level the child understands that people can be simultaneously and mutually aware of their own and others' motivations.

Appendix E — French Version Of Empathy Test

"Que ferais-tu?

1. Perspective égocentrique

L'enfant ne fait pas de distinction entre son point de vue et celui des autres. Il ne considère que son point de vue car il ignore que les autres peuvent avoir un point

de vue différent du sien.

Ex. : « Michel devrait donner un petit chien à Jacques. C'est amusant (« fun ») des chiens. »

L'enfant ne considère pas la possibilité que Jacques ne veut peut-être pas de chien.

2. Perspective axée sur les informations

L'enfant considère que lui et les autres peuvent avoir différentes interprétations plausibles d'une même situation et ce, dépendant de l'information que chacun possède. Toutefois, il ne peut pas se mettre à la place de l'autre car il ne conçoit pas qu'une autre personne ait accès à ce qu'il pense.

Ex.: « Jacques a dit qu'il ne voulait pas de chien. Michel aime les chiens mais il ne devrait pas en acheter un pour Jacques. »

3. Perspective axée sur les sentiments

L'enfant commence à être conscient que les autres pensent ou ressentent différemment, non seulement parce qu'ils possèdent des informations différentes mais aussi parce qu'ils ont des valeurs différentes. L'enfant peut se mettre à la place de l'autre et ce faisant, il peut se voir à travers les autres. Il comprend qu'une personne peut voir le point de vue de l'autre.

Appendix F — Stories For Emotion Recognition [Based on Freeman, 1984]

Happiness

- 1. Today is Peter's birthday. He is having a birthday party for his friends. They will play lots of game and eat cake and ice cream.
- Today Peter is going to his favourite place, the zoo. His mother has packed a picnic lunch so they can eat outside. Peter will see the animals he likes.

Sadness

- Peter lives on a street with many children. Peter and his friends play together all the time. One day, Peter's mother tells him that they are moving to another street and he will not be able to play with his friends anymore.
- 2. Peter has a dog whom he loves very much. Peter and his dog play together all the time. One day, the dog runs away and no one can find it.

Fear

- 1. Peter and his mother go to the grocery store. Peter helps pick out the food. When Peter turns around, he does not see his mother anywhere.
- 2. Peter is sound asleep. He dreams that a big monster is chasing him. Peter wakes up screaming.

Anger

- 1. Peter goes to pre-school. He plays with his favourite toy, the "peoples". Then a boy comes over and grabs all the "peoples" away.
- Peter wants to watch Sesame Street. He has been waiting to watch it all day. But Peter's big brother wants to watch a different program so Peter and his big brother start fighting over which program to watch.

Appendix G — Emotion-Recognition Test (French Version)

La joie

- 1. Aujourd'hui, c'est la fête de François. Il va faire une fête pour ses amis. Ils vont jouer à toutes sortes de jeux et manger du gâteau et de la crème glacée.
- Aujourd'hui, François va au zoo. C'est son endroit préféré. Sa maman a préparé un dîner pour faire un pique-nique dehors. François va pouvoir voir les animaux qu'il aime.

La tristesse

- François habite une rue où il y a beaucoup d'enfants.
 François et ses amis jouent tout le temps ensemble. Un jour, la maman de François lui dit qu'ils vont déménager sur une autre rue. Il ne pourra plus jouer avec ses amis.
- 2. François a un chien. Il l'aime beaucoup. François et son chien jouent tout le temps ensemble. Un jour, son chien s'enfuit et personne ne peut plus le trouver.

La peur

- François et sa maman vont à l'épicerie. François aide sa maman à choisir des céréales. Quand François se retourne, sa maman a disparu.
- 2. François est bien endormi. Il rêve qu'un gros monstre lui court après. François se réveille en criant.

La colère

- François va à la pré-maternelle. Il joue avec ses Pokémon préférés. Tout à coup, un petit garçon s'approche et lui enlève tous ses Pokémon.
- François veut regarder Pokémon à la télévision. Il a attendu toute la journée. Mais son grand frère, lui, veut regarder une émission différente. Alors ils se chicanent tous les deux pour choisir l'émission qu'ils vont regarder.

The Triadic Relationship in Thinking For Oneself

LEE, JI-AEH

The Way of understanding Tao in the matter of teaching philosophy

Tao is empty like a bowl
It may be used but its capacity is never exhausted
It is bottomless, perhaps the ancestor of all things
It blunts its sharpness
It unties its tangles
It softens its light
It becomes one with the dusty world
Deep and still, it appears to exist forever

The Tao moves the other way the Tao works through weakness the things of this world come from something something comes from nothing²

hile rationality is a significant criterion of logical thinking in Western philosophy, the enlightenment of wisdom such as Tao is a goal of philosophical discipline in the East. In contrast to the articulation of rational processes of thinking, in Buddhism, Hinduism, and Taoism as well, this kind of enlightenment is basically obtained or developed by the individual and inner criteria which are mainly manifested in a person's mind, rather than in objectively shared common principles. In this sense, the Eastern philosophies are not quite separated from religious training, where the purpose of doing philosophy is ultimately the same as the ideal of a person's religious achievement. This mode of enlightening wisdom is embedded in the meaning of "philosophy" in Asian cultures. So, in fact, it is not an approach easily taught by the Western educational system.

One of the main aspects of teaching philosophy this way would be *life-examination*; one wants one's students to be equipped with a certain philosophical wisdom to uplift their lives meaningfully. And this focus on life-examination, even if it does not imply Eastern thinking, comes to be fu-

Ji-Aeh Lee (jiaehlee@ewha.ac.kr) is a Full-time Lecturer in the faculty of Philosophy Department at Ewha Woman's University, Seoul, Korea. She is the executive director of the KPO (Korean Philosophy Olympiad) and editor of the Korean Journal of Teaching Philosophy. eled mostly by each individual's own efforts, akin to doing philosophy by dealing with existential solitude in the face of God. In the Korean context, these features of Eastern philosophy are always regarded as the main characteristics in teaching philosophy both in and out of the educational system, whereas the mode of critical thinking is taught in rational Western culture. For the latter, philosophical education based on the mode of Eastern insight might be understood as a totally subjective and personal matter. Unlike a reasoning process, focusing on each person's enlightenment is aptly compared to the task of catching wisdom by means of "facing the wall for nine years." This mode of teaching philosophy would be awkward in an educational setting based on rationality. What is wrong with a subjective mode of doing philosophy such as inner enlightenment through the Way? Why can't critical thinking be a way to understand the Way by one's own endeavor? Or, can it be concluded that philosophy is basically an individual work, its aim being to accomplish a certain philosophical wisdom, and to disentangle each person from thinking based on social conditioning?

I do not deny the importance of personal and subjective aspects in teaching philosophy for its living connection with each learner's life. However, this does not mean that an individual's own philosophical thinking is appropriate apart from any consideration of the socio-dialogical domain with others. Even the kind of thinking involved in facing the wall for nine years cannot be a form of absolute intuition, without any mediating thoughts. Even the enlightened person still has some ideas, generated by her interactive relationship with others before she faced the wall; she probably keeps thinking about those ideas in a kind of silent interaction with things in her environemnt, such as a climbing bug, sunlight and shadow, or even the sound of the wind. I cannot define such a mode of thinking as a totally individual and subjective one; rather, there is always significance in the on-going, interactive, communal dialogue which transpires even in this kind of "solo" quest for enlightenment.

It might be possible to identify the individualistic, "life-examination" way of doing philosophy with the characteristics of "thinking for oneself" as defined by the Philosophy for Children Program. In a community of philosophical in-

quiry, each member is regarded as a thinking self, and her thinking is encouraged, not in the solipsistic Cartesian way, but via the inter-reflective way of dialectical thinking. 4 Where then do we find the philosophical resources which enable the mode of "thinking for oneself" to be an authentic way of reaching philosophical wisdom? I would like to argue that they can be found in Charles S. Peirce's pragmaticistic conception of "person" and "sign," because his notion of the pragmaticistic self can shed light on the matter of the ideal of subjective enlightenment as a mode of thinking in philosophical education. For Peirce, the self is a sign which should be interpreted in terms of a triadic relationship, a relation which always needs mediation in order to overcome dichotomy. I believe that one of the characteristics of "love" in the word philosophy implies this mediating function. I will attempt to develop this point from the Peircean perspective of "synechism," whereby the sign-using self enables its growth in philosophical wisdom through its own triadic, mediating characteristics, which are summed up in Peirce's notion of "thirdness."

Peirce's Phenomenology and its Relation to His "Thirdness"

How can the subjective, enlightenment mode enter into dialogue with the objective rationality-based mode of doing philosophy? Is there any method by which we can apply the subjectivity of the "Way" in Eastern religious-philosophical thinking while avoiding its idiosyncratic and sollipsistic implications? What is the role of thinking for oneself in the search for enlightenment? How can we describe the features of the thinking self in this mode? Is there any bridge between the Eastern and the Western modes of doing philosophy? These are the questions which have led me to Peircean pragmatism, towards constructing a space for the intersection of the Eastern enlightenment mode of philosophical training and the Western mode of teaching philosophy.

In his critique of Cartesianism, Peirce points out that reasoning cannot afford us any direct intuitive introspection into cognitive certainty; rather, reasoning is by definition an inquiry process, operating through hypothetical inferences.5 Since he is interested in how we think rather than what we think of, he concludes that our thinking capacity is not part of us a priori, but necessarily includes an empirical base for its cognitive procedures. Peirce does not follow the same epistemological path as the empiricists; rather, he pursues the structure of the thinking process and articulates it from a metaphysical point of view. The thinking structure in our minds, he insists, is like the procedure of interpreting a sign; thus it always implies both internal and external domains of mind. For Peirce, there is no "thinking" without "signs," and in addition, the person who is thinking is in itself a sign. 6 This is the reason why I want to deal with his phenomenology and sign theory, and I hope to construct a supporting bridge in which his pragmatic notion of thinking and the self reveals both the merits of and the implicit problems of Eastern philosophical enlightenment understood as a mode of teaching philosophy.

First of all, in order to articulate the Peircean paradigm which encompasses a view of both person and world, I would like to begin with the issue of "phenomena." For this, however, we need to be reminded of the "pragmatic maxim" that Peirce, the founder of pragmatism, provides us with:

Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object. In this sense, "practical bearings" assume the role of bridging the gap between our minds and things in the world. It is impossible for us to conceive of the object in itself; all we can say is that we have an idea of the object. But this idea is not subjective to our mind only, but somewhat *inter-subjective*, if only because our conception of the object consists of both our mind's hypothetical thinking and the actual results that the object cannot help but effect in the world. Thus, in the Peircean perspective, idealism and realism do not conflict with each other; nominalism is the only enemy in his pragmaticism.

Furthermore, I think his point in this maxim represents how he describes the world; things are not recognized in themselves, and although we are also not sure of what would be, it does not seem to be something absolutely separate from our cognition. The ways of our knowing things and the ways of the things' existence come to face each other, producing a spark (as I describe a vital, undeniable encountering moment) in this world. Although this spark can be recognized only by the cognitive agent, it is not possible to be known to the mind without a live, existing movement from the beings involved. I think this is a unique feature of Peirce's pragmaticism; he always focuses on the liveness and vitality in which both the mind and things are maintained, rather than a fixed and static state that results in an absolute picture of the world. In this sense, I think the metaphor of a "spark" can be explained in what Peirce indicates as a "phenomenon" in his term phaneron. This is because his realism is rooted in this kind of phenomenological point of view, not in any epistemological absolutism or theological doctrine.

Then, let us consider his theory of *phaneron*, and the pragmaticistic notion of phenomenology (in his term, *phaneroscopy*), which directly connects with his discussion of categories. He states these points as follows:

What I term phaneroscopy is that study which, supported by the direct observation of phanerons and generalizing its observations, signalizes several very broad classes of phanerons; describes the features of each; shows that although they are so inextricably mixed together that no one can be isolated, yet it is manifest that their characters are quite disparate; then proves, beyond question, that a certain very short list comprises all of these broadest cate-

gories of phanerons there are; and finally proceeds to the laborious and difficult task of enumerating the principal subdivisions of those categories. My view is that there are three modes of being. I hold that we can directly observe them in elements of whatever is at any time before the mind in any way. They are the being of positive qualitative possibility, the being of actual fact, and the being of law that will govern facts in the future. ¹⁰

Reminded of his pragmatic maxim above and relating it to this passage, I conclude that the meaning of "practical bearing (effects)" in his pragmatic maxim indicates the very notion of the observation of phanerons, and that our conception of these effects implies the whole process of generalizing its observations. As a matter of fact, the pragmatic maxim is a theory of meaning whose source lies not in the results or usefulness, but in the relational process. Likewise, Peirce's phaneroscopy is a theory of categories which is not an a priori domain beyond recognition, 11 but a relational, modal aspect of being that is indispensable in our observation. Accordingly, he classifies it in three modes of being; in short, possibility (may-be's), actuality (be's), and the hypothetical (in a subjunctive mood, would-be's). 12 I believe that the method of "tacit understanding" as a pedagogy in the Eastern enlightenment tradition needs to be considered in terms of Peirce's categorical phenomenology. Let us then further examine the three categories as the modes of being in his phenomenology.

The Pragmaticistic Self Thinks in a Triadic Relationship of Three Categories

For Peirce, the three categories necessarily interact with one another when we are perceiving and recognizing a thing; they are constituted in a perfect harmony as a whole, like a trinity. He names them in his own terminology: Firstness, Secondness, and Thirdness. First of all, I want to look into them according to Peirce's original words.

The first category comprises the qualities of phenomena, such as red, bitter, tedious, hard, heartrending, noble; and there are doubtless manifold varieties utterly unknown to us... They have no perfect identities, but only likenesses, or partial identities....The second category of elements of phenomena comprises the actual facts. The qualities, in so far as they are general, are somewhat vague and potential. But an occurrence is perfectly individual. It happens here and now.... The third category of elements of phenomena consists of what we call laws when we contemplate them from the outside only, but which when we see both sides of the shield we call thoughts. Thoughts are neither qualities nor facts. They are not qualities because they can be produced and grow, while a quality is eternal, independent of time and of any realization.... As general, the law, or general fact, concerns the

potential world of quality, while as *fact*, it concerns the actual world of actuality... Law, then, is something as remote from both quality and action as these are remote from one another.¹³

From the Peircean point of view, the world is revealed by phenomena according to the three categories. We then need to look at the relations among the three categories. Each of them has its own unique characteristics as an independent element of phenomena. However, they are organically connected within a perfect unity, not a totality; there is nothing else needed for the explanation of phenomena. Their organic relation implies a dialectical structure; the third relays between the first and the second.

Firstness is a direct element of phenomena which we can figure out by our immediate feelings, without any bridging conditions. For example, the greenness of trees is the first category. We may feel the freshness of green from the trees in the spring, because one of the qualities of tree is a green color. But our attributing greenness to trees may not be correct if we are in another season and another area on the earth. The quality of the phenomenon, or tree in this case, is only potentially green. Even if this immediate feeling (or sensation) of "greenness" may or may not be correct for the tree, we do not hesitate or doubt to accept the green from the tree when this phaneron's appearance has that color.

However, when you insist that the tree I am looking at outside the window has one green leaf on this windy winter day, you indicate the second category of the phenomena, Secondness. This is a fact of the phenomenon, as a fictional story turns out to be a real story. And in order to prove this actual, individual fact, we have to struggle with the possibility that "it is not a green leaf." For Peirce, this mode of actuality is not directly and naturally given without any obstacles, but it requires an effort of resistance against one for the other, in a dyadic tension. Thus, the second category of phenomena describes mutual actions between two rival aspects, like a structure of wills. My observation of the green leaf becomes a brutal fact as long as my will to believe it resists all other opposing sensations about the tree. I think the mode of experiencing also represents this Secondness, 14 because there is an undeniable force coming from the phaneron which sustains our belief in the fact before contemplating any rational evidence or supporting idea; this occurrence happens here and now, like a sudden experience.

Then how can the potential qualities and the actual facts consistently reveal a phaneron in our observation? At this point, we need Peirce's third category. *Thirdness* is a role of relating a derived feature of the phenomena with a forceful action of fact. Thus, this category has a certain distance from both the first and the second, but gives us a bridge in which the tension between Firstness and Secondness can be reduced. The distance of such a mediating role implies "intelligibility"—a cognitive aspect of experience. ¹⁵ In other words, we have to *think of* both the greenness of the tree in general as well as the green leaf in winter, upon

which we come to make a *hypothetical* statement of these phenomena; for instance, we could conclude the greenness of the winter leaf to be an artificial green if someone had purposefully painted on. By means of this *if-then* thinking, with experimental activities we generalize a certain phenomenon and in the long run we establish a *law* or regularity regarding this kind of phaneron. This cognitive activity revealing the lawfulness of objects is always in effect when we face a phaneron and relate it to other phenomena. If I summarize these features of the three categories in a table, it would be like this:

The Characteristics of Three Categories

Category	Firstness	Secondness	Thirdness
Attributes	qualities	facts/action	law/generality
Manifested by	immediate feeling	struggle/ resistance	mediation/ thoughts
Mode	potential	actual	Hypothetical
Relationship	monadic	dyadic	Triadic

One point I must make here is that the third category's hypothetical thinking indicates a triadic relationship. Peirce denotes a structure of "meaning" as the genuine triadic relation, and presents us an example of the triadic predicate mode, giving: A gives B to C. 16 These three components of the triadic relationship, the giver, the thing given, and the receiver, are indispensable to perfect the meaning of "giving." Peirce insists from this point, furthermore, that the triadic relation of Thirdness represents the very structure of a sign, because "a sign is something, A, which denotes some fact or object, B, to some interpretant thought, C."17 I will deal with his theory of signs in detail below, though what strikes me in his discussion of the third category is that the crucial characteristics of this Thirdness are "continuity" and the "process" of cognitive consciousness, pragmatic features of "thinking," while Firstness is an immediate feeling and Secondness is an instant experience.¹⁸ Moreover, for Peirce the third category of phenomena does not merely indicate a mechanical connection with a whole. Instead, it should include a "moderation" in which the mediating agent's intention to balance is working; that is the typical feature of Peircean cognition. Thus, Peirce distinguishes this moderation as Thirdness from other categories as such: "Action is second, but conduct is third. Law as an active force is second, but order and legislation are third. Sympathy, flesh and blood, that by which I feel my neighbor's feelings, is third." That is to say, based on Firstness we experience Secondness; but both elements of phenomena are passive for human beings because the initiative of those categories basically lies on the objects. So, in order to have a genuine unity between the subject and the object, Thirdness should be regarded as the pivotal category of manifesting phenomena in the world. In the next section,

I would like to discuss more characteristics of this Thirdness with relation to the issue of the self.

Why is a Person a Sign?

Peirce's categorical phenomenology is a pragmaticistic viewpoint, crumbling the distinct boundary between the ontological and the epistemological domains. Especially by means of the feature of the "triadic relationship," in Thirdness we come to know that what we call "the world," or whatever you want to define as metaphysical existence and essence, cannot be separated from the agents who *are* aware of it from a certain point of view, and such an aware-

ness must take a role of *moderating* among the related others continuously. In this sense, the Thirdness for Peirce is nothing but a *consciousness of process*. ²⁰ It is not a peculiar feature in Peircean pragmatism; it is like a synonym for "inquiry" or "thought." The true meaning of "understanding," therefore, cannot help but be constructed within this Thirdness. I think this is why Eastern enlightenment of the *Way*, as far as it is a mode of do-

ing philosophy, needs to consider this inevitable triadic relation of Thirdness to know phenomena as a whole. A moment of insightful recognition may occur in an instant, as Secondness, but in order for this insight to become genuine knowledge—true acquaintanceship with the way (tao)—the consciousness of process moderating the "relata" should be continued. This point could probably be better articulated if I dig into Peirce's reason for defining a person in terms of this Thirdness, and what kind of contemporary implication we can draw from his theory of the self.

The Pragmaticistic Self Represents a Trichotomy of Signs

Peirce has commonly been known as a logician, but his logical viewpoint is rooted in his theory of signs, because for him "logic is, in its general sense, only another name for *semiotic*, the quasi-necessary, or formal, doctrine of signs." I believe Peirce has in mind that the genuine structure in both logic and the semiotic indicates the third category, *Thirdness*. That is to say, Peirce's abduction, hypothetical reasoning, is one example of the triadic relation, and the genuine relationship in explaining phenomena denotes the structure of a sign. I think we can approach his notion of "person" through his semiotics. First of all, let us examine how Peirce describes the triadic relationship in a sign; he presents "three trichotomies of signs," as follows:

Signs are divisible by three trichotomies; first, according as the sign in itself is a mere quality, is an actual existent, or is a general law; secondly, according as the relation of the sign to its object consists in the sign's having some character in itself, or in some existential relation to that object, or in its relation to an interpretant; thirdly, according as

its Interpretant represents it as a sign of possibility or as a sign of fact or a sign of reason.²²

Like the three categories of phenomena, but with deeper complexity, Peirce classifies the structure consisting of a sign in the three "trichotomies" which are the very counterparts of Firstness, Secondness, and Thirdness--respectively: the sign in itself, the sign's relation to other relata, and the sign's interpretant. In addition, each trichotomy has three factors that represent the very features of each category: mere quality, object, and possibility (Firstness); actual existent, existential relation, and fact (Secondness); a general law, interpretant, and reason (Thirdness). In his explanation of the triadic relationship, as we noticed above, each component of this relationship is independent from but indispensable to another for unity as a whole. However, his focus is always on the third, since the three relations can be perfect only by means of the third; moreover, the third in itself implies a triadic relationship. The three categories are all necessary to figure out phenomena, but the last, Thirdness, is the most prominent factor for his phenomenology. Likewise, in Peircean semiotics, a sign could not be constructed without the first and second factors of each trichotomy, but here also, the role of the third factors, "law, interpretant, and reason," is crucial to each trichotomy's perfection. Furthermore, the third trichotomy, Interpretant, represents the typical structure of a sign embracing the other trichotomies: the triadic relation of possibility, fact, and reason, which is the compact description of three categories. From this consideration, therefore, we come to know that his three categories take a pivotal role in the theory of signs.

Although Peirce unfolds a very complicated explanation of each trichotomy, I would like to look into the most understandable example of his semiotics: the set of *icon*, *index*, *and symbol*. As a matter of fact, Peirce treats this example as the second trichotomy above, but when he writes about "sign" in a dictionary, Peirce indicates those three as the triadic necessaries of a sign.

A sign is either an icon, an index, or a symbol. An icon is a sign which would possess the character which renders it significant, even though its object had no existence; such as a lead-pencil streak as representing a geometrical line. An index is a sign which would, at once, lose the character which makes it a sign if its object were removed, but would not lose that character if there were no interpretant. Such, for instance, is a piece of mould with a bullet-hole in it as sign of a shot; for without the shot there would have been no hole; but there is a hole there, whether anybody has the sense to attribute it to a shot or not. A symbol is a sign which would lose the character which renders it a sign if there were no interpretant. Such is any utterance of speech which signifies what it does only by virtue of its being understood to have that signification.²³

Likewise, "icon" implies the characteristics of Firstness, "index" denotes Secondness, and finally "symbol" perfectly

indicates Thirdness. According to such a triadic relation in the explanation of Peirce, in the long run the structure of symbol is the most typical mode of a sign, representing the genuine phenomena of signs in their triadic relationship, that is, *Thirdness*. Why is this so important to our discussion of teaching philosophy? How can this point challenge the Eastern enlightenment mode of doing philosophy? According to my understanding of "education," its genuine performance should not be a mere "indexical" or "iconic" mode of sign activity; instead, it must be managed as a "symbolic activity" of the triadic relationship among subject matters (F), educators (S), and educatees (T) in a process of continuous interpretation. In addition, if we put a person in this educational activity and specially recognize the educatees in the third category, then we cannot help but admit that the agent of education is a symbol itself having Thirdness. In other words, for perfection in the trichotomy of educational activity, the learning self is "a consciousness of progress" moderating the relata. I think this is why we can deal with Peirce's semiotics in the issue of "the self" as a source for application into the educational domain.

The Pragmaticistic Self Implies the Personality as a Sign-Using Organism

The reason I want to notice the relation of Thirdness to the self, especially the learning agent, is in drawing the feature of liveness from the Peircean notion of "person." In other words, my focus on the point that Peirce considers a person as a "symbol" is not due to any intention to regard human beings as mysterious existences needing to be deciphered; instead, it results from the structure of its "symbolic" nature—one is a community base and the other is a future-oriented character. Neither are, of course, separated from each other, but connected with respect to life. I think such a focus may have something in common with Corrington's notion of "a sign-using organism" in his discussion of Peirce's theory of the self.²⁴ Moreover, one crucial reason I want to deal with the learning self in a symbolic activity is that I hope this notion of self will challenge us to reconsider the completely individual-based enlightenment of solitary training, such as in the case of "facing the wall for nine years." The other reason is due to my concern over the future of the philosophy; is itin the spirit of love of wisdom that so-called academic philosophy is divided by many schools which adhere to their own traditiontransmission so that they do not and cannot understand one another? I believe an educated person especially trained in doing philosophy at least has no antagonism toward other schools and tries to talk with others, rather than to build a stronghold of academic territory.

Accordingly, my first point on Peirce's notion of the self is about its "community-based" feature and the second is its *future-oriented* character. What kind of conclusions about sociality can we draw from the fact that a person is a sign, or symbol? How can we relate such a social base to

the "liveness" of the self as a learning agent? And why is it significant that this sociality is wedded to an orientation toward the future? First of all, let us consider the well-known passage in which Peirce addresses the relation between man (person) and sign (word):

It is that the word or sign which man uses is the man himself. For, as the fact that every thought is a sign, taken in conjunction with the fact that life is a train of thought, proves that man is a sign; so, that every thought is an external sign, proves that man is an external sign. That is to say, the man and the external sign are identical, in the same sense in which the words homo and man are identical. Thus my language is the sum total of myself: for the man is the thought... But the identity of a man consists in the *consistency* of what he does and thinks, and consistency is the intellectual character of a thing; that is, is its expressing something.... [R]eality depends on the ultimate decision of the *community*; so thought is what it is, only by virtue of its addressing a future thought which is in its value as thought identical with it, though more developed. In this way, the existence of thought now, depends on what is to be hereafter; so that it has only a potential existence, dependent on the future thought of the community. The individual man, since his separate existence is manifested only by ignorance and error, so far as he is anything apart from his fellows, and from what he and they are to be, is only a negation. This is man, [... proud man, /Most ignorant of what he's most assured, /His glassy essence1.25

As we noticed in the feature of Thirdness, in a triadic relationship the pivotal role lies in the third, and the representative factor of the three is also the third. Likewise, in a sign relationship, Interpreter, the third, is crucial to wed the signifier sign to the signified object. In this sense, such a triadic relation can be applied to a person itself; the identity of a person basically relies on the consistency of the person's thoughts (T) which are revealed externally by words, language (S), and through the person's bodily organism (F). Thus, a person is a sign in which the third is thought. However, this does not result in the Cartesian thinking self of a priori reason. Rather, with the person as a sign, the structure of the third itself, i.e., the thinking, also indicates a Thirdness of the mediating role of signification. Therefore, for Peirce, the self is a symbol itself, and in this sense, every thought of a person cannot help but be a sign.

At this point, I encounter my first focus of selfhood--the community-based feature. The meaning of "sign-person" in the triadic relationship against dichotomous metaphysics, I think, necessarily implies a communicative faculty, because the characteristic of "talking with / talking to" is the most pivotal condition of personality. Colapietro seems to support this implication; he interprets Peirce's notion of the self through the idea of communicability, claiming that "the

most basic fact about the human person is that he or she is a being in communication with other beings or more accurately, a being who possesses the capacity to be in communication with others."²⁶ Colapietro makes the point that Peirce's notion of the self is quite different from James' psychological individuality, which focuses on "the irreducible fact of privacy," which is apt to incline to relativism; but Peirce's genuine community consists of communicative agents who have the "ubiquitous possibility of communication."²⁷ In other words, the emphasis on the sign relation in explaining the self intends neither a mere social base of signification, ignoring any personal side, nor a certain cooperative spirit in merely collective individuals' symbolizing activity. Instead, it denotes an explicit relationship of the self with others, in which he or she is enabled to "talk" with his or her own thoughts; it never neglects subjectivity, but the subjectivity is alive within a communicational relation. This is why Peirce insists above that to be a self is to be a member of a community. The "liveness" of a person is proved in talking with other selves as an interpreting activity. Without this process of communication, his notion of "reality" depending on "the ultimate decision of the community" is meaningless, and apt to be misused by an authoritarian culture.

With regard to the Peircean notion of the self as a sign, my next point concerns its future-oriented feature. Peirce explains that a personal thought has "only a potential existence" depending on "the future thought of the community," since every thought is a sign which has a meaning in communication with other selves. In a sense, this seems to be a negative, passive aspect of selfhood and personality: a total dependence on community. Colapietro also interprets it as a necessary "down side" of the dual aspects of the Peircean self,²⁸ however I do not think such a dependence is negative one, because the pragmaticistic self does not lead a complete existence, but needs to be developed toward a certain direction. I think this is what Peirce means by "a potential existence." In our modern era, every mode of dependence is considered negative because we value individuality, but a growing individual is indispensably dependent on a broader ground (a significant horizon) beyond that person's present status, like a seed in soil (here, remember that the growing agent is the seed, not the soil). The community based on communication in the long run exists for each self, and if there can be a growth of the community, it would imply every self's development. Thus, I interpret the sign-person as in an organic relationship with its community, in which a conception of time-interval, i.e., past, present, and future, should be involved. And the dependence of a person only has meaning if it represents the future. Likewise, Peirce's notion of Thirdness, as well as his concept of "practical bearing," implies a hypothetical cognition about the future by means of the present regularity established from past observation. His notion of the self as a sign intends a transformational process toward the future in its connection with the past and the present. That is, for Peirce a person is a historical being with a developing direction.

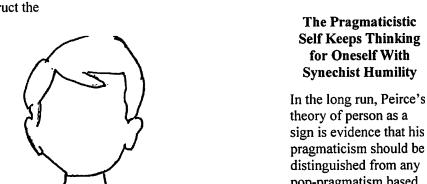
In connection with Colapietro's notion of "communicative self," Corrington defines such a future-oriented self as "the hoped-for future self" because only hope can satisfy the mediation role of Thirdness, and "provides the horizon within which we reconstruct the

meaning and value of the past self."²⁹ That is to say, the communitydependence of the signself notion is necessary for organic activity through communal interaction, and the core of that activity is a radical hope for *liveness*. Corrington describess this feature of the "signusing organism" thus:

> Consciousness and the personal ego, once removed, give way to a semiotic self that is fully communal. The social self is the true self insofar as it is the locus for those public signs and interpretants that operate to give the individual some sense of semiotic identity. The identity relation (at least in the realm of the human process) is a species of self-control. That is, the self becomes what it is through

self-controlled semiotic acts that point toward an emancipatory future. The heart of self-control is hope, not a simple belief in the success of the infinite long run, but a radical hope that the self and its communities will be fully transformed in their depth structures.³⁰

Although I do not quite agree with Corrington's interpretation of the Peircean self as a mode of nature's "naturing"-for that is more related to the feature of pragmaticistic community -- I do agree that "the heart of self-control is a radical hope" which calls for the transformation of the self and its community. Moreover, this kind of hope can be a bridge between Peirce's notion of a person and his pragmaticistic perspective of synechism.



sign is evidence that his pragmaticism should be pop-pragmatism based on selfish individualism. A person is a sign consisting of both the signified and the signifier in a community because the identity of the self cannot be imagined without its interpreted or interpreting domain. This triadic relationship is not a mechanical circle, but a "circulation" in order to "live" for the future. In this sense, we have to regard the learning agent as a sign with this living power of Thirdness. How then does the agent continue to be equipped with such an organic resource? What can be an alternative model to the solo enlightenment mode in doing philosophy if it is based on the idea of a person as a sign-using organism? For these investigations, we need to connect such

a notion of the self with Peirce's theory of "continuity" in his term *synechism*. I hope it will suggest an *anti-solipsisticl* mode of doing philosophy.

Remembering that Peirce insists "a person is only a negation because of its manifesting in the ignorance of what he is most assured" which he emphasizes with a line from Shakespeare, "I we could infer that the sign-person is a fallibilistic self, not in a negative sense, but with a positive motivation of the self's growing process. First, that the signify-

ing relation of the self requires negating oneself in the present is not to destroy the self, but rather to open up to the new self; it is a process of establishing my *reality* over identity. Second, such a fallibility of means a tension of "uncertainty" that makes the self aware of a proper criterion. It forces a person to keep *thinking*; the very core of Thirdness is happening in this mode.

The awareness that "I could be wrong" helps the person to continue formatting her self-identity in her relation to the community. This continuity is the main reason that Peirce insists on the fallibilistic notion of the self, even though the fallibilism involves an indeterminacy that "is never absolute but always swims." However, this very feature of uncertainty or indeterminacy (in other words, plasticity or oscilliation) is pivotal to continuity, and thus, his notion of fallibilism is indispensably related to the doctrine of continuity. Then, let us consider how Peirce defines his theory of continuity, synechism;

Synechism is that tendency of philosophical thought which insists upon the idea of continuity as of prime importance in philosophy and, in particular, upon the necessity of hypotheses involving true continuity... Synechism is not an ultimate and absolute metaphysical doctrine; it is a regulative principle of logic, prescribing what sort of hypothesis is fit to be entertained and examined.....In short, synechism amounts to the principle that inexplicabilities are not to be considered as possible explanations; that whatever is supposed to be ultimate is supposed to be inexplicable; that continuity is the absence of ultimate parts in that which is divisible: and that the form under which alone anything can be understood is the form of generality, which is the same thing as continuity.³³

The true continuum is not only an acceptance of fallacy or mistakes, but also a hope for the possibility of explanation or interpretation, because all things involving persons are phenomena which can be recognized in Thirdness. Even if an unknown thing exists, as long as we are able to talk about it, there should be a continuity of signifying process belonging to it. This does not take the path of the hubris of human reason, but an honest attitude to reveal what the limit is, without making the mistake of regarding a particular insight as universal enlightenment. At this point, I would like to consider that this kind of synechist mind can be called philosophical humility which is not an emotional, blindly self-degrading attitude, but a thorough self-criticism based on both continuous cognition and discernment with sensitivity toward the future and the community. Thus, I believe that if we looked for a genuine attitude of "loving" in the philos-sophia spirit of doing philosophy, it would have something in common with such a synechistic humility, since philosophy is after all a hopeful power in which we continue the role of mediation and moderation in order to reach liveness.

Conclusion

From the point of view of synechist humility, in conclusion I would like to reconsider the solo enlightenment mode of thinking by myself. I do not reject the need for solitary meditation, looking into the depths of oneself, in doing philosophy. However, since I regard a person and all kinds of objects of person's mind as signs, supported by Peirce's pragmaticism, I insist that all subjective thinking cannot help but be part of a triadic relationship, and it should be a mode of thinking for oneself -- implying a communal dialogue with other selves consisting of a community, the source of an inescapable horizon. In addition, the more the self keeps thinking for oneself, the more the self's signifying vision is expanded into the future, toward a hope for the growth of the community. Within a philosophy classroom the learning agent, as well as the teaching agent, is a moving text which needs to be interpreted within the triadic relationship with the other sign-persons and the subject matters. Moreover, the activity of agents (Thirdness) in doing philosophy cannot be separated from the life of the class as a community, which is often hardly considered in the Eastern enlightenment mode of teaching philosophy or in a religious project of transforming personality. In addition, based on the Peircean notion of the self -- keeping in mind its socially based humility -- I believe it would be productive to investigate other modes of the teaching of philosophy which are mainly focused on the development of community.

Bibliography

Colapietro, Vincent M. Peirce's Approach to The Self: A Semiotic Perspective on Human Subjectivity. Albany: State University of New York Press, 1989.

Reason: The Philosophy of Charles Sanders Peirce, ed. Jacqueline Brunning and

Paul Forster. Toronto: University of Toronto Press, 1997, pp.262-88.
Corrington, Robert S. An Introduction to C.S. Peirce: Philosopher,
Semiotician, and Ecstatic Naturalist. Lanham: Rowman & Little-field Publishers, Inc., 1993.

Hausman, Carl R. Charles S. Peirce's Evolutionary Philosophy. Cambridge: Cambridge University Press, 1993.

Hookway, Christopher. *Peirce*. New York: Routledge&Kegan Paul, 1985.

Peirce, Charles Sanders. *Philosophical Writings of Peirce*, ed. Justus Buchler. New York: Dover Publications Inc., 1940.

Skagestad, Peter, The road of inquiry: Charles Peirce's pragmatic realism.

New York: Columbia University Press, 1981.

Endnotes

¹ [LaoTzu's Tao Te Ching, ch.4]; John M. Koller, Oriental Philosophy (New York: Charles Scribner's Sons, 1970), p. 289

² [LaoTzu's Tao Te Ching, ch.40]; Red Pine (Bill Porter), trans., Laotzu's Tao Te Ching, (San Francisco: Mercury House, 1996), p. 80

³ This is a typical method (panna) of obtaining the Way (Tao), according to Bodhidhalma (usually called Dharma) who is the founder

of Zen. I think it can be a description of teaching philosophy mode if learning philosophy aims only to reach to the Way. This kind of philosophy education might be defined as the following saving, "if you understand (learn or enlighten) the Way in the morning, your life would be fulfilled even if you die that night."

⁴ For instance, in *Elfie* (book one, chapter one, episode ii), Elfie's own thinking seems to be represented in a mode of the Cartesian thinking self. But, if you carefully take a look the process of Elfie's reflection which comes to an end on the Cartesian proposition, you could recognize that Elfie's "thinking for oneself" results from the interactive dialogue with significant others, such as Seth.

⁵ Peirce, "Some Consequences of Four Incapacities"(1868), in Buchler (1940), pp.229-30

⁶ Ibid., p. 230, p.249 ⁷ Peirce, "How To Make Our Ideas Clear"(1878), in Buchler(1940), p. 31 ⁸ See Hookway(1985), Ch. I and VIII and Hausman

(1993), Ch. 4 ⁹ Peirce, "The Principles of Phenomenology," in Buchler (1940), p. 74. Here is the passage he defines these terms; " Phaneroscopy [or Phenomenology] is the description of the phaneron; and by the phaneron I mean the collective total of all that is in any way or in any sense present to the mind, quite regardless of whether it corresponds to any real thing or not. If you ask present when, and to whose mind. I reply that I leave these questions unanswered, never having entertained a doubt that those features of the phaneron that I have found in my mind are present at all times and to all minds."

¹⁰ Ibid., p. 75

11 At this point, I think we need to distinguish realism and aporiorism. Skagestad (1981) and Hookway (1985) interpret that Peirce's realism seems to include an aporiorism, but I disagree with them; because we have to define "aporiorism" only

within the epistemological sense, rather than an ontologically preexistence, and Peirce never insists that things can be recognized be-

fore our real experience of them.

¹² According to Colapietro, Peirce uses these terms in his discussion of "reality" as follows; " the will be's, the actually is's, and have beens are not the sum of the reals. There are besides would be's and can be's [or might-be's] that are real.(CP; 8.216)"; See Colapietro (1997), p. 276

Peirce, "The Principles of Phenomenology," in Buchler (1940), pp. 77-78

¹⁴ See Ibid., pp 88-89. As an example of Secondness, Peirce explains "shock" as an "experience" which is distinguished from a perception.

¹⁵ See Hausman (1993), pp 11-12

¹⁶ Peirce, "The Principles of Phenomenology," in Buchler (1940), pp. 91-92

¹⁷ Ibid., p. 93

¹⁸ Ibid., p. 95. Peirce also relates our consciousness into these three categories; "It seems, then, that the true categories of consciousness are: first, feeling, the consciousness which can be included with an instant of time, passive consciousness of quality,

without recognition or analysis; second, consciousness of an interruption into the field of consciousness, sense of resistance, of an external fact, of another something; third, synthetic consciousness, binding time together, sense of learning, thought."

¹⁹ Ibid., p. 80

²⁰ Ibid., p. 96. Peirce states that, "But that element of cognition which is neither feeling nor the polar sense, is the consciousness of a process, and this in the form of the sense of learning, of acquiring, of mental growth is eminently characteristic of cognition. This is a kind of consciousness which cannot be immediate, because it covers a time, and that not merely because it continues through every instant of that time, but because it cannot be contracted into an instant."

²¹ Peirce, "Logic as semiotic:the theory of signs," in Buchler (1940), p. 98

²² Ibid., p. 101

²³ Ibid., p. 104, p. 102

²⁴ Corrington (1993), Ch. Two "The Sign-Using Self and Its Communities"

25 Peirce, "Some Consequences of Four Incapacities," in Buchler (1940), pp. 249-50

²⁶ Colapietro (1989), p.37

²⁷ Ibid., pp. 78-79

²⁸ Ibid., pp. 61-62, 76-77

²⁹ Corrington (1993), p. 104

³⁰ Ibid., p. 113.

31 See my quotation above on Peirce's notion of the self (fn. #25); [.... proud man, /Most ignorant of what he's most assured, /His glassy essence]. He cites the lines from Shakespeare's Measure for Measure. 32 Peirce, "Synechism, Fallibilism, and Evolution," I & II, in Buchler (1940), p. 356

³³ Ibid., pp. 354-55

22 Colbeck, Children Under Power

Children Under Power: Philosophers as Children

JOHN COLBECK

"Power tends to corrupt." (Acton, 1887)

We have had philosophy for children and philosophy with children. I now suggest that we go further in this direction and consider 'philosophers as children' and vice versa, 'children as philosophers'. I advance two main reasons in support of this suggestion. First, if "Power (over others) tends to corrupt" as Lord Acton suggested (I think it tends to corrupt both the 'emperors' and their subordinates by making them lazy-minded and irresponsible) then we should reduce the exercise of our power over children to a necessary minimum. Second, if "To understand is to equal" as Balzac suggested then, if we do not equal children we will not understand them, nor they us.

To understand someone completely, I would have to become that person. Although that is clearly impossible, it nevertheless is possible to move in that direction towards becoming, in imagination, a little child again. We could, with difficulty, get rid of a great deal of accumulated 'baggage' in the form of 'knowledge' by calling it, more modestly, 'belief'. One consideration which may help in that strange 'time-reversal' endeavour - UN-educating and UN-schooling - is the fact that our most ancient wisdoms have come down to us from ancestors who lived in the earliest childhood of our species. We can also reflect that, on an evolutionary time scale, we are the youngest 'baby' species to evolve so far. I suggest that we, adults, are not much more aware than children of the misleading and heavily indoctrinatory process by which we teach them to use words 'properly' -> as we do -> 'correctly'. Traditions of 'philosophical correctness', handed down from antiquity, can be questioned. My recommendation - courses in language awareness - is that we take steps to make both ourselves and children more honestly aware of what we are doing. In this way we would be doing philosophy as - on an approximately equal footing with - children. And they would be doing philosophy with us. The insidiously indoc-

John Colbeck (jcol@compuserve.com) was a lecturer in physics and physics education, now retired, from Goldsmiths' College, London University. He writes mainly in Philosophy of Education, where he describes Socrates, The Cynics, The Authors of The New Testament, Nietzsche and Lyotard as the main half-heroes in-spiring him towards a peaceful revolution in language in this article.

trinatory power of words - which also empower us (some of us much more than others) - a modern version of the invisible tyrant, Gyges - would thus be laid open for inspection, criticism and democratic de-selection.

here is a good deal of evidence to support Lord Acton's statement that power tends to corrupt. It is not the kind of statement which can be verified as a universal truth but, if we take it to be generally true, as I do, a number of radical conclusions result for current policy under which adults are responsible for schooling children under compulsion - the practice of schooling children under power, to become like us.

To avoid corrupting our selves and children, we should reduce our exercise of power over them to a necessary minimum. If what I say about this is to be clear, I must first make clear the way I am using the key words "freedom," "power," and "corrupt."

The Status of Lord Acton's Statement

I believe, and claim with reasons, that Lord Acton's statement is *generally* true. The word "tends" makes clear the limited claim that it is partially, empirically and contingently true that, with greater power, there tends to be greater corruption. It is not hard to see examples supporting this idea.

Power: Physical, Executive and "Spiritual-Persuasive"

The most *physically* powerful nations discharge energy fastest: they do most to pollute our seas, rivers and atmosphere. But a physically powerful individual person may be a pillar of purity and virtue. Physical power makes physical bullying *possible*, not necessary.

Those people with greatest *executive* power over others do most organizing and therefore have greatest responsibility for any corruptions we see in human affairs. The party in power is most often accused of sleaze. The party in power has most *opportunity* to exploit its power in corrupt, narrowly self-serving ways. Again this *positive correlation* of power with corruption seems to reflect a contingent, rather than a necessary truth. Executive power makes bullying possible, not necessary.

In the case of spiritual, intellectual or persuasive power, the situation is more complex. If I have greater charisma, elegance or intellectually and emotionally persuasive powers than others, as a great orator may have, then I will have greater responsibility than others for any corruptions there may be in the consensus attitudes prevalent in my culture and society. The thinkers we call "great" (those who have lasted longest, for better and worse) have greatest responsibility for corruptions in our thinking, in our uses of words, and thus for the ways in which we feel and act. They also have greatest responsibility for anything we see as "good" in our thinking and mind-sets. Their thinking becomes embedded in our language and so is handed down in tradition, from one generation to another. They are thus (in part) power-full "inside" each of us (re-in-carn-ated in us), below the level of consciousness, even if we never heard of them. Arguably, they exercise the most powerful kind of power-the power to motivate and guide the most powerful kind of beings to evolve so far--human beings. Their power is exercised, mostly, unawares.

Several ancient Greek philosophers thought (surprise!) that philosophers were experts in identifying "the good" and that they were therefore best fitted to rule in an "aristocracy"-- rule of the good. A "meritocracy" is a modern form of this idea. Philosophers have been quick to identify such biased, Narcissistic thinking "correctnesses" in others.

Nietzsche also had a quick eye for special pleading by people, especially philosophers, promoting their own kinds of value-power (1). He nevertheless concluded that philosophy is the most powerful kind of power "... the most spiritual will to(wards increase of) power" in our world (Nietzsche 1886), words in brackets added by me).

Executive and 'spirit-influence' power are both exercised mainly through the use of words. Words are therefore important tools for people exercising power over others. That is not their only function.

It is *not* being claimed that (every kind of) power (necessarily) corrupts. Such "absolute" general statements are, in my view, rarely, if ever, either possible or desirable. They belong in an either/or logic of polarized extremes, the excluded middle, and singular meanings of words. I don't think the real world of non-words can be neatly, or accurately, chopped up like that. It is a great, and liberating, criticism-empowering advantage of accepting that we see only "partially"--incompletely, with unavoidable personal bias--that all statements, made only by fallible persons, can be seen as corrigible--open to criticism. Nobody knows. Certainty is dead. Our truths ".. for the most part, are only half-truths" (J S Mill, 1859).

Most of living goes on in the (not-to-be) excluded middles between extremes (2). I commend a "both and more" logic of plural perspectives.

Language both liberates and empowers and it moulds and imprisons our thinking. Identifying the imprisoning factors (the stone walls and iron bars) is a first and necessary step towards greater freedom. Lack of awareness of

the imprisoning factors (unconscious and sub-conscious influences) disempowers us. If the "walls" and "bars" are invisible, sub-conscious, we cannot hope to escape them. Unconscious or sub-conscious factors, many of them misleadingly concealed or taken for granted in our ordinary uses of words, are not open to critical examination or voluntary change until we re-veal, dis-cover, un-cover and expose them.

It is one of the jobs of philosophers doing conceptual analysis to uncover these assumptions (the human meanings, intentions and "wanting to say") *implied*, lying *under* ordinary, common sense, consensus uses of words. Words rarely carry all their meanings (the meanings of their users and interpreters) on their faces, open to superficial observation or examination.

Words describing (non-word) "objects"--things thrown "ob" (out there)--can never match perfectly, 100%, the non-word "things" themselves.

There are far too many (non-word) freedoms and powers ex-isting (being "ob," out there, like ob-jects) in our world for a word like "freedom" or "power" to have a singular meaning or use. We give such words many meanings (our meanings, intendings, wanting to say) in different contexts.

Freedoms and Powers

I use the word "freedom" to refer to the many non-word freedoms which share, I think, a common, minimal but necessary characteristic or concept.

I am free if I have the ability to discharge energy (meta - thinking - or physical energy) without external or internal compulsion, pressure or constraint.

I would be completely free, if that were possible, only if all such "other" influences were absent or inoperative. I would then be "completely" "autonomous," "independent," "a law unto my self." I would be able to do whatever I want or wish. I might even become able to choose what to want or to wish but that idea borders on the edge of not making sense.

That extreme of complete freedom seems, like most extremes, neither attainable nor desirable. At one end it would imply something like random behavior, governed by no rules or regularities, internal or external. At another it would seem to require absolute power or omnipotence. Most of living, as before, goes on, alternating, moving to and fro, in middles between those polarized extremes, according to our assessment, or feeling, for the direction in which there is, currently, either too much freedom or too little. We may judge, for instance, that there is too much freedom in sexual matters, or too little. Or we may judge that current forms of sexual activity are of a wrong, unbalanced, non-ratio-nal kind; too much emphasis on physical aspects (in the extreme, "lust" or "rape"), or on intellectual factors, too little on emotional aspects, for instance, might be a typical judgment. A "Cecil" in Room with a View (E. M. Forster) or a "Casubon" in Middlemarch

Colbeck, Children Under Power

(George Eliot) are examples of "en-theos-iasm" (godwithin), or love, which over balances on a too-narrowlyintellectual side. Our different kinds of powers need balancing.

Power

The concept of power which I adopt, in similar "minimal" style, is "ability to *organize* energy—first my own, then that of others." I think teleology—aiming and intending—is necessarily involved in exercising power. I am not so sure that it is necessarily involved in being free, although it clearly *can* be involved in exercising freedom *for a purpose*. When that occurs, however, I think the exercise becomes organized and so is an exercise of power. Once again, a sharp distinction is unlikely to capture the non-word situation between freedom and power—"ability" is common to both.

Corrupt

First, I want to analyze and extend the statement to give the verb "corrupt" both a transitive and an intransitive meaning. I also want to narrow the meaning of power to the context of "power over other people." I think there are other, non-corrupting kinds of power, but that power over other people corrupts both the "emperor" and his "subjects." The "king-emperor-dictator" is corrupted by having no peers or superiors to criticize and correct him. He can "get away with murder," so he often does, on a large scale, legalized in war. The "subjects" are corrupted by having no responsibility for consequences of decisions in which they had no part. No responsibility without freedom to choose.

If power over others tends towards corrupting, two important questions arise:

- 1. Where is most corruption likely to be found?
- 2. Where is *least* corruption likely to be found? In women, innocent children (until we corrupt and adult-erate them), animals, trees?

Power Over Other People

Power over other people can be obtained and exercised in a number of ways. Most obvious, perhaps, is military power. Emperors invade and colonize other countries with their armed forces and subjugate their peoples. Who knows why? These empires tend to decline and fall—they corrupt internally, intransitively. Arguably, they also corrupt, transitively, the subjugated peoples, making them irresponsible, but I do not wish to argue that point in connection with military conquest. Defenders of imperialism can also point to benefits conferred by the Roman and British Empires on their "colonies." I want only, at this stage, to raise the question of why imperial powers behave as they do. Must they?

What were British people, soldiers, missionaries and ad-

ministrators *doing*, and why, when they swarmed all over the world painting the map pink? What "drove" them to behave like that?

What mad military dreams drove Napoleon and Hitler to march on Moscow? Or what were the Japanese thinking when they attacked a far bigger nation at Pearl Harbor? Field Marshal Montgomery once said "There is only one rule of war. Don't march with your land armies on Moscow." (3). Are the leaders and marching followers in these doomed dreams of empire still driven by the instincts shared with army ants? It seems at least possible, since we share genetic material with all living beings. Language may conceal our instincts; it is unlikely to abolish their power. It may even increase their power by making them invisible.

A second form of power, which often continues to be exercised after colonial peoples obtain political independence, is economic or commercial power. I am not specifically concerned with that here, except to note that it is relevant to current political moves to "privatize"—commercialize—educational institutions. If these moves succeed, we need to look carefully at who then obtains power, and money, from running schools and universities. How will it affect the "ethos" of schools if Rupert Murdoch, for instance, buys up a few universities and schools? How will his (corrupting?) power over students and children be controlled if schools are to be run for the sake of an "it" - money - with zero "intrinsic" value?

The kinds of power with which I am more concerned in educating are media power and cultural or "value" power-spiritual or persuasive power. These have to be taken together because they are closely related. We could call them "control of information, or knowledge," and "control of valuing." Again, the two cannot be sharply separated. Information is value-loaded and value-selected. Values are information- and knowledge-dependent, so is language. And vice-versa, language, information and knowledge are value-dependent. A word is invented when some "nonword" experience gives rise (or seems to give rise) to a need for it. Someone has to experience fear before we need a word for it.

Here I want to extend the use of two ironical terms: "journalese" which refers to the kind of language we detect in journalists, and "correctness" which puts ironical skids under *political* fashions and orthodoxies.

We all too easily identify these failings in *other* professions but we rarely see them in our own. We do not hear much about "philosophese" or philosophical correctnesses. Nor do educators or religious people often refer to "educationalese" or religious "correctnesses." Why not?

Self-criticism and self-mockery are rare virtues in most professions, as words like "teacher," "profession," and "professor" indicate. We tend to be rather solemn and serious, even pompous, about our own values and, especially, about our "human morality," "rationality" pursuit of "the" truth and pursuit of "the" good. The road to hell is paved

with human intentions which we sincerely believe (at least in words) to be "good."

This may or may not be evidence of a healthy self-confidence and self-esteem, but it scarcely suggests that we "really" believe (in action or in speech about our selves and our own values and concerns) that modesty and a self-critical attitude are virtues. A modicum of self-awareness and self-mockery might not come amiss.

When we do think humility and modesty are virtues, we commonly feel that we have them! "He that humbleth himself wants to be exalted." (Nietzsche 1878)--for his virtue of humility.

"Blessed are the 'top' people"—authorities—seems to be somewhere near our attitude, in according respect, status, salaries, honors and awards. A judge, Lord Irvine, was recently awarded a *rise* in salary equal to the whole salary of a teacher. By the prevailing money standards, that implies that he is ten times as value-able as a teacher. What kind of people are they who organize these scales of value?

The rise was justified as "built in" to scales "agreed" in "rules" established to "regulate" comparative salaries of "top" civil servants. I believe it was stopped as a result of protests.

I don't think teachers had a voice or a vote in those ruling decisions made in discussions among the power classes. Who appoints professors? Other professors? Authorities appoint authorities? They regulate themselves. Human systems are self-perpetuating and self-reinforcing--until they "succeed" too well, over-reach themselves, become "topheavy" empires, decline and fall.

This is still not directly relevant to class-room issues with children, but getting nearer. It would not be difficult to make the general point that hierarchical, so-called "independent," "autonomous" and "self-regulating" systems are "corrupt" in the sense that they permit and encourage self-serving, self-reinforcing and self-perpetuating—narcissistic—nepotisms. Who are the selves who regulate the selves? "Quis custodiet?"

Privatization of the nationalized industries, local management and grant-maintained status for schools all led quickly to a hefty hike in salary for the new "managers." They needed extra money, secretaries, offices and staff for the heavy responsibility of looking after all that money. Who arranged these increases? They did, with power, or license, to regulate themselves. In switching to a new mind-set and assumptions, these huge increases of salary became (seen as) "necessary," "just" and "right."

Corruption—Transitive and Intransitive

In schools and schooling of children (important words, for me, with connotations of schooling shoals of fish to be alike) it is the corrupting effect of control of language and information—"knowledge"—by academic "power-classes which concerns me.

Probably the most pervasive and potentially corrupting

form of indoctrination occurs, unintentionally and unawares, when adults, usually parents, first teach children to use words. We necessarily teach children to use words "correctly" and "properly"—like we use them. "If you want something done 'properly', do it yourself. No-one else can do it as you would do it." Authorities slide the meaning of "proper" (= "my own") to mean "correct." "Education, properly understood, is the attempt to actualize the ideal implicit in Socrates' saying that the unexamined life is not worth living." (R S Peters, 1973)

A superficially seen "is" statement thus implies and conceals an "ought": "Educating ought to be done that way," on pain of not "really" doing educating as it ought to be "properly" understood and done.

It is a very common form of the naturalistic fallacy (to which authorities are most prone)—concealing an "ought," derived in that case from Richard Peters' own values, behind an "is" statement. "You 'ought' to believe what (I say is) true." Those values were derived, in turn, from one aspect of Socrates. Don't forget the man, when you listen to the argument. When he says "is," he often means "ought to be seen as." He promotes his values.

Acting on the precept "Forget the man, and listen to the argument," Peters forgot a very important person -himself-his own exercise of power.

Along with these "correct" uses of words—implied in them—we "get in"—to children, unavoidably, whole swathes of values, beliefs and attitudes--doctrines or teachings--which we, in turn, inherited from our parents and teachers. It is called "handing down" or "tradition," "culture" and "civilizing." We re-in-carnate our ancestors in traditions. It could be called ancestor worth-ship. The process is inherently conservative--transmission of orthodox doctrines in such a way that they are very difficult to get out again, because we are not consciously aware of them going in. It is subliminal indoctrination which we are, mostly, powerless to resist because we are unaware of it. We could become aware of it. To escape from a prison, a first requirement is to be aware that you are in it.

It is easy to identify this kind of indoctrination in uses of words by, say, a Roman Catholic family who speak, routinely, about "the" Faith, and "the" Bible implying that there is only one of those worth talking about. But the problem of subliminal indoctrination by teaching children to use words "correctly" (like we do) is far from being confined to such obvious cases.

We use "the" sun, "the" universe and "the" world, when there are millions of suns and probably an infinite number of universes and worlds. We should use "our sun," "our universe" and "our world" to make our words fit better (never perfectly) with the world "ob," "out there" of non-words and ob-jects.

We similarly misuse "the" in referring to "The" Bible, "The" faith, "The" truth, "The" good, "The" concept, as if those were singular. Assumptions are "got in" that way.

Wittgenstein said "The meaning of a word is its use."

26 Colbeck, Children Under Power

This led some of his followers, in the early days of philosophy of education, into interminable debates about "the" concept of "education," "teaching," "learning" and "indoctrination," as if there must be a single (and universalisable) "use" for each of those words, to be ob-jectively "found," "out there." "The" is the definite article; its use in the singular is rarely apt unless what is referred to is definite and singular. After it is first invented for a single use or purpose every word tends to acquire *many* additional meanings and uses, strictly, as many uses as there are users but, fortunately, with large overlaps.

Such indoctrination into the "correct," "proper" uses of words cannot altogether be helped but we could be more aware of it ourselves and we could then honestly warn children about it. That would ensure that the indoctrination (getting a teaching in) was *not* subliminal but accessible, at a conscious level, for inspection, criticism and *change* by ourselves and by children, not equally, but less un-equally. The power we exercise over children in the uses of words would be open for inspection. We could more honestly encourage a dynamic, critical, "opening-mindedness."

Hermeneutics suggests that it would be more accurate to say (and it is a possible interpretation of Wittgenstein's saying) that the meanings of words are the meanings of their users and of their listener-interpreters. This would importantly make it clear that there are always at least *two* meanings "in play" in any act of communicating--the meaning of the sender and the meaning "seen or got" by the receiver. Matching those two meanings commonly presents little trouble in the case of simple "objects," like tables and chairs. This strongly suggests that something similar must be going on in the neurons of my brain when I say "That's a table over there," to what is going on in your brain when you hear me say that.

We could say that, in respect of those words, our two brains have been "schooled" alike-- and it is fortunate, for the sake of our ability to cooperate, that this is so.

It is far otherwise when the "non-word" at issue is a human activity like "educating," "loving," "valuing," "teaching" or "learning." Proverbially, disagreement about the non-word God, to which the *word* "God" refers, ranges from those who do not believe that there is a non-word God, ex-isting, "being out there," through a very wide spectrum of beliefs and values associated with the word in different theistic religions to Nietzsche who declared "God-the supreme power, that suffices" (Nietzsche, 1887).

The general point here is that it is naive to expect a perfect "match," or one to one "correspondence" between a word and the non-word to which a user wants to refer (carry across or trans-fer) by using the word. Words and non-words are not "the same kind of thing." The result is that uses of words are very often misleading--systematically so. We should warn children about this, on pain of dishonestly indoctrinating them in great swathes of our own beliefs and values in such a way that they are very difficult to get out again.

One of my favorite examples is the nursery rhyme chanted by parents to children playing on a see-saw: "See-saw, Marjorie Daw, Johnnie shall have a new master; he shall have but a penny a day, because he can't work any faster."

Monetarism, payment by results and the assumption that everyone has a master are "got in," unseen, with frequent repetition, at age, say, three or four. Fairy stories and pantomime themes also "get in," again and again, the idea of getting rich, getting married and living happily ever after. Thousands of romantic, happy-ending novels reinforce the message in later life.

What is to be Done?

Faced with this pervasive and largely unavoidable indoctrination achieved by the handing down of languages in a tradition, what can be done in educating children to help them to become free of it - that is, free to reject *or* accept it? While they are unaware of it they are "free" only to accept uses of words as they are used now - by authorities.

One very simple answer is to tell them about it. When an idea, a belief or a value is held *unconsciously, unawares*, it is not *accessible* to conscious reflection and criticism. It motivates and guides our actions unawares, so we are "internally controlled and directed" by it (in effect by the people who got it into us), without realizing it. This might be seen as the Myth of Gyges operating in 2003 (Rimon Or 2003). Once we become aware of it, we at least have the *possibility* of choosing to believe or value--and so to act-otherwise. The possibility of deposing the invisible tyrant is opened up. In Lyotard's (1988) terms, a victimizing "differend" (an oppression for which there are no words available in which to complain) is dismantled. I am grateful to Anat Rimon Or for pointing me towards this idea.

At quite an early age, courses, or lessons, in "language awareness" would encourage an attitude of radically critical thinking about words in teachers and children about equally. I say "equally" there, advisedly, because I think that, currently, adults and children are about equally unaware of the indoctrinatory effects of our own "ordinary," "common-sense" language. We tend to take it for granted and philosophers are perhaps particularly prone to this mistake when they appeal to the *authority* of "ordinary language." Whose authority is that? Who controls uses of words? Perhaps no-one has complete control over uses of words, but some people have very much more influence than others in that power field.

If, as I believe, ordinary language is systematically misleading (more examples shortly), this could lead to philosophers being a major source of serious mistakes in our talking, thinking and mind-set.

An obvious and topical example is George Bush saying "There is no middle ground; you are either with us or against us." This is the mistake of either/or logic and the excluded middle which we find philosophers still passion-

ately defending. There are several other options. Most of life goes on in excluded middles, or *via media*. It is a mistake to turn those into no-man's lands or killing grounds. We—yes, we philosophers—are responsible for that kind of thinking. It leads towards polarized thinking in terms of either/or extremes, and to war. A logic of "both and more," or plural perspectives has considerable advantages, but I cannot defend them here.

Lessons in the subject could be conducted with adults and children on a roughly equal footing as joint "learners." Hence my title "Philosophers As Children." It could have been "Children As Philosophers."

Some of the imaginative questions already used in Philosophy with children offer opportunities for discussion in this field of language: "What would it be like to be a slug?" What would it be like to be deaf and dumb? If monkeys could talk would they be human? If we had not learned to talk would we still be apes? How, and why, did language get started? How do words get invented? Who benefits most from current uses?

Children could be set the task, in pairs, of devising a "private" language in which to describe a simple experience, picture or scene. Describe a rainbow, for instance.

But more specific and careful "undoing" of indoctrination is needed.

Children should learn to avoid saying "the" universe, "the" sun and "the" world and to say "our" universe, "our" sun, and "our" world. This would extend their horizons by implying (almost certainly correctly) that there are other universes, worlds, and other suns. In the case of "our world" it would also imply our responsibility for it. Many other uses of "the" in the singular are misleading in implying singularity.

Whether or not it is true, it would also be best to tell children that "Nobody knows--anything!" It seems to me likely to be true, and therefore honest, at least in many general contexts. No belief can ever be *completely* justified as true. It would also be highly liberating and motivating towards learning. Moral and epistemological bullying would have to cease. Modesty in our claims would be in order.

I cannot want to learn what I (think I) already "know." My interest in learning X is considerably lessened if I think teacher already "knows" X and will soon be telling me all about it--offering me second-hand used bathwater "knowledge" to "take in," passively.

Since, as fallible human beings, we see, and can expect to see, only partially--incompletely, with bias--it would be honest, and modest, to make children alert, awake and aware about that. Their trust and confidence needs to be, not in "knowledge," but in us, people, who value them equally with our selves. It is important to be true to people--to each other.

We do need beliefs, hopes and loves. We could not live, act, speak or argue without those. We do *not* need knowledge (if that means completely justified, true belief). Knowledge is neither attainable nor desirable; it would be

an intellectual and emotional prison--death to the spirit of exploration. That is the humorous, symbolic message of the authors of Genesis, in the story of the poisoned apple. You will die if you aspire to knowledge of good and evil. We are dying, saying "Thou shalt not kill, except in large numbers, when I say so." The warning has been repeated many times in the history of ideas (4), but it is always suppressed by knowing authorities—adults--as subversive of their authority. Socrates and the Cynics get exiled; Jesus is crucified; Galileo (the first relativist) is forced to recant. We adult-erate the message, and children, in making them "grow up" under our power-compulsion, to talk and become like us. Watch children in their playgrounds, in order to understand our selves. They are "only" copying us—their adult educators and exemplars—in ours.

"The child is father to the man" (Wordsworth) and vice versa. We evolve together, mutually "creating" each other. We-yes, we philosophers--We Are Responsible (WAR). If philosophers are children, just beginning to learn, in a very young species, still driven by instincts, then it may help us to learn about ourselves (the "proper" study of humankind) to learn as children, with children and from children what we adults are "really" like, for real, in action. The differentiation between children and adults is not sharp, but continuous. It occurs in infinitesimally small, evolutionary steps, or stages, to which there is no single, "the" clear beginning or end. "In the beginning ..." was a mistake. So is "In the end ..."

Notes

- 1. This is a prevailing theme in Nietzsche's writing, with emphasis on *spiritual* values as the highest, most powerful kind of power, because they motivate (energize) the most powerful beings to evolve so far. One quote must suffice: "Value is the highest quantum of power that a man is able to incorporate." *Will to Power*, Aphorism 713. (Nietzsche 1888) The theme is also discussed in *Beyond Good and Evil* pages 20-21 (Nietzsche 1886).
- 2. A logic of the *included* middle, developed as early as 1945, is discussed in Nicolescu, Basarab (1998) *Godelian Aspects of nature and Knowledge*.
- 3. Montgomery, Bernard (1956) Lecture at The Army Staff College, Camberley.
- 4. The number of references to this idea, and the reasons for believing it, require too big a diversion here. I add them, in brief outline only, as an Appendix. To avoid the kind of singular thinking dogmatism which I criticize, I should say that at least two perspectives are possible: one in which knowledge is possible and one in which, for the reasons given, it is not. Broadly, for everyday, now, here purposes, some "facts" (things made or done) are sufficiently uncontroversial for us to say that we "know" them, while accepting that there is no complete defense against a determined skeptic. Universal statements cannot be verified. Similarly, for everyday purposes, we sensibly treat the earth as flat and static: the sun "rises" in the East and "goes down" in the West, although we believe that "really" we are spinning and hurtling round our sun at 60,000 mph.

References

Acton, Lord (1887) Letter to Bishop Mandell Creighton, quoted in The Oxford Dictionary of Quotations (1992), Oxford University Press, from Life and Letters of Mandell Creighton (1904) Vol. 1, Ch. 13.

Lyotard, Jean François (1988) *The Differend* Minneapolis, Minnesota Press, p. 9.

Mill, J S (1859) *On Liberty and Other Essays*, Oxford 1991, p.65. (I am grateful to Katsushige Katayama for drawing my attention to this passage.)

Nicolescu, Basarab (1998) Godelian Aspects of Nature and Knowledge: Bulletin Interactif du Centre International de Recherche et études Transdisciplinaires nhttp://perso.club-internet.fr/nicol/ciret/

Nietzsche, Friederich (1878) Human, All-Too Human: A Book for Free Spirits Translated by Hollingdale, R J, Cambridge University Press, 1986-93, p. 48.

Nietzsche, Friederich (1886) Beyond Good and Evil Translated by Hollingdale, R J (1973) Penguin Books, p. 21.

Nietzsche, Friederich (1887) *The Will To Power* Aphorism 1037 Translated by Kaufmann and Hollingdale (1968), Random House.

Nietzsche, Friederich (1888) *The Will To Power*, Aphorism 713, Translated by Kaufmann, Walter and Hollingdale, R J, (1968) New York, Random House.

Peters, R S (1973) 'The Justification of Education' in *The Philosophy of Education* Oxford University Press, p. 262.

Rimon Or, Anat (2003) unpublished thesis, seen in draft.

Appendix Reasons For Believing That Nobody Knows

There are many reasons for believing that nobody knows but there is entrenched opposition to the idea among philosophers. I can set out the reasons supporting the belief only briefly.

1. If knowledge means *completely* justified, true belief, then it is not possible. If a statement is *partially* justified--incompletely and with personal bias--then it is better to call it a belief and to set out the reasons in favor of believing it. Reasons which appear to be "cast iron" are strong, hard, brittle. Statements can be made only by fallible human beings.

2. If a universal statement is one that will be true for everyone, everywhere, for ever, it amounts to a prediction which can never be verified. Even Karl Popper accepted that.

3. The idea that (almost) all our truths are half-truths (Mill), or that "Nobody knows" (A A Milne-Pooh Bear) is maximally liberating, motivating towards learning for both children and teachers. It enjoins modesty and flexibility in our claims. "If teacher doesn't know, we can have a go." Moral and epistemological bullying have to cease. Persuasion--believing, hoping, loving and valuing have to continue, without inflexible dogma.

4. The idea has surfaced again and again in the history of ideas, only to be suppressed by terrified authorities as subversive. Sources include:

The Tao-te Ching and Sanskrit. A wise man does not think he knows.

Genesis: do not aspire to knowledge of good and evil. That apple is poisonous. You will die if you eat it. Just look around at the killing.

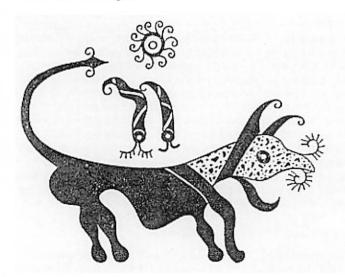
Socrates: "I know only one thing: that is, that I know practically nothing," (more than one version). He reiterates this in response to accusations that he is "only" speaking ironically-suggestions that he does "really" know. He insistently led his opponents to the points of *elenchus* and *aporia--*awareness of self-contradiction in what they thought they knew, and puzzlement--stirring, subversive and motivating states of mind. He was exiled for subversion as, later, were the Cynics.

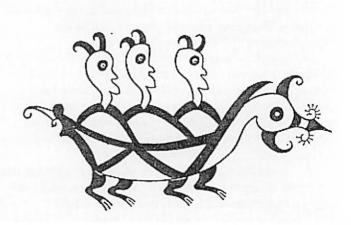
Jesus, with a similar message and way of living to Socrates and the Cynics, repeated the idea several times in The New Testament (TNT), e.g. John 9, 41: "Now ye say "We see. Therefore your sin remaineth." He was crucified for it, as was Osiris-Dionysus. Galileo, the first relativist, was forced to recant.

In Socrates/Plato, the argument in Meno's paradox makes the problem of self-reference clear. In order to *re-*cognise knowledge, or wisdom, we would need already to have "cognised" them. In more modern terms, we cannot *expect* to see, or judge, our own mind's eyes, because they are what we "see" or "judge" *with*. So judgments are boomerangs, prejudices. They are always, until the end of time, made too early, sub-judice, with the jury still out. Authorities commonly authorize themselves and get away with it.

Nietzsche also repeats the claim many times, in different ways. "There is no truth, but truths." "Truth is that form of error," with scornful references to "The men of knowledge." "Why not rather untruth?" "Faith in the categories of reason is the cause of nihilism" presumably because all "Why?" reasoning chains lead on a regress (or progress?) to nothing, to dislike of that and so to the need to *go on* (not back), over and beyond nihilism to affirmation of life.

When Pooh Bear is told that "Owl knows things" he responds, after a pause, "Yes. I suppose that's why he never *understands* anything." Jeff Lewis drew my attention to that.





How to Avoid Children's Questions

OSCAR BRENIFER

Philosophy with children, like all human activities, suffers from a certain number of what might be thought of as nervous complaints. To start with, one can wonder why a grownup would in general prefer working with children than with adults. Of course there can be and there are all kinds of good, generous, noble and necessary reasons justifying and explaining such professional choices, but as always in a philosophical analysis, it seems necessary to point out the natural pathologies which are both the cause and the result of those very same choices. And since questioning seems to be at the heart of philosophizing, let's analyze in particular how adults relate to questions raised by children.

Adults With Children

We do not pretend to propose an extensive study of the question, but only to contribute a few hints that would bear consequences on the philosophizing itself. Intuitively or consciously, a person who has difficulties establishing relationships with adults will incline toward children. First, because in many ways they do not challenge the identity of the adult as much as other adults, since he feels big and powerful in their presence; second, because authority and power is generally given off the bat to the adult over children; third, because the adult has the impression of knowing a lot, compared to children; fourth, because the adult can live his childhood again and for this he will feel happy with his little companions. Now, of course, none of this is totally clear cut or even conscious. There is always a certain ambiguity in the relation between the adult and the child. When the grown up sees the little guy stumbling along, he certainly feels very competent, strong and powerful compared to him, but at the same time he experiences a little touch of jealousy at the idea that this young being still has all his possibilities, that his life still lies ahead of him, which in consequence tends to induce some regrets in the adult mind

Oscar Brenifier (alcofrib@club-internet.fr) is a teacher trainer and consultant in philosophy with children in France and around the world, in schools, cultural centers, libraries, prisons, homeless shelters and cafes. He is President of the French associations Cercle de Réflexion et Dèbats Philosophiques, and Institute for Pedagogical and Philosophical Practice, and conducts the Seminar of Practical Philosophy at the International College of Philosophy.

over a foreclosed past--although all the good souls among us will, again, protest energetically that such jealousy of a poor defenseless and innocent child could ever enter their bosom.

Children are natural philosophers in the sense that questions come easily to their minds. At an age where they still discover so much of the world and themselves, wonder and amazement, those key features of the philosophizing mind, still operate quite fully. But as with anything having to do with human nature, it can be curbed or enhanced, it can be ground to a quasi-halt or developed. In fact, even at the early age or seven or eight, we see how a certain principle of reality, which we might call as well a principle of certitude, as legitimate as it might be, invades the mind of the child, which has the effect of choking the metaphysical interrogation which until then constituted a major part of the intellectual life of the child. He enters a "scientific" age, which comprises its own domain of established questions and answers, but tends to restrict its activity to the realm of the physical and the possible, the more commonly acceptable. Our point is that there occurs here a certain conditioning of the mind, quite expectable and acceptable since this process constitutes the major part of learning how to live in society, in order to conform to socially acquired knowledge and behavior, but a process which of course operates to exert a major reduction and constraint upon the mental field of the child. Of course the nature and modalities of this transformation will largely depend upon the cultural and familial context which surrounds the child.

Too Busy

We seem to have identified three major ways in which child questioning and amazement is dampened and slowly extinguished. We will present them in order of increasing subtlety and sophistication, although it is not so mechanical as this, and often operates through a certain mixture of parental and adult behavior. The first one, most common and crudest, is the straightforward inattention to questioning and the astonishment. It either takes the lighter and indirect form of not listening, or the more brutal injunction to remain silent or go elsewhere. It seems important to us to classify these two types of reaction in the same category,

for even if one bears a softer and more civilized appearance, in the long run it has exactly the same effect. And how many parents, who never or rarely deprive their child of the right to speech, and would even be horrified at such an idea, will with the best conscience in the world busily attend to their own business--whatever the utility or the necessity of those affairs, be it working, shopping, watching television, or going places--without taking real time to listen to their child. By acting in such a manner, the parent establishes a clear-cut hierarchy in the mind of his child, determining for him his present or future--what is primary and what is secondary. Immediate necessity definitely overrides the gratuity of intellectual examination and the beauty of contemplation. When this is the case, the adult should not afterwards exclaim to himself, then or later, that his child does not reflect before acting and merely follows his first impulses.

Ready Made Answers

The second way to turn off child questioning is by answering the question, no matter what the sophistication and the appropriateness of the answers--although the time which is taken and the way in which this answering is accomplished will obviously make a difference. The reason for our critique of the parent or teacher answering is first that it induces a warped relationship to questioning, and second, that it encourages a tendency to depend upon outside authority, developing heteronomy rather than autonomy. What we qualify as "warped" is the fact that questions are not valued in themselves, as a precious gift our own mind offers us, but are transformed into a mere want, a lack, as something missing, an unpleasant situation which the benevolent parent is willingly ready to correct by providing readymade answers, or for that matter half-baked answers, certainly less innovative and creative than the question itself. The idea is that a question has value in itself, it is an opening upon the world and being, it has necessarily produced a concept or an idea, in a negative form which is no less valuable than its mirror image, the answer. A question has an aesthetic value. Its form is mind-provoking, similar in this aspect to a painting or sculpture which the spectator contemplates without background thoughts or preoccupations about the utility, the truth or the resolution of the problem offered to his senses and reason. This perspective does not prohibit any attempt to answer, but the answer is deemphasized, de-idolized, losing thereby its status as the final and ultimate step of the activity and process of the mind. Good and profound questions cannot be answered, and should not be answered. They can only be problematized, which for us means that we can initially analyze their content and appreciate them for what they bring, and in a second step start producing ideas as hints that can shed a light on different paths they can embark us upon. Questioning is a mind experiment, a tool allowing us to explore the limits of knowledge and understanding. For this reason, it remains crucial that the adult, parent or teacher admit to the

child that a question cannot be answered, either because he does not know how, or because he postulates and explains that there is no definite answer to it. And for the fear that this kind of comment would generate anxiety in the child's mind--who needs values on which he can anchor his own spiritual self, just as he needs food to fulfill the needs of his biological self--let's just say that hopefully a child does not eat as soon as he wants, and that he is taught to defer and delay the satisfaction of his needs, in order to free himself from immediacy and impulse. Desire is healthy and productive to the extent we allow it to play its role in time, and not "resolve" instantly the imbalance it produces in the self. After all, one might as well get used to it, since disequilibrium and unsteadiness are fundamental characteristics of life.

Autonomy

Regarding the problem of autonomy, as in any other kind of activity the child is involved in, it is useful and indispensable that he learn to manage by himself. The teaching provided implies then that the adult withholds in himself the natural "mothering" tendency which compulsively incites us to spoon-feeding, in order to invite the child to come to grips with himself and develop his own capacities. Teach a man to fish, rather than give him fish, says the Chinese proverb, signifying that giving fish is a hindrance to learning the art of fishing. But of course—and here lies the reality of this issue--it is more practical to provide actual fish, mere objects than can be easily handled, since teaching fishing implies a lengthier and subtler procedure, where the teacher has to consciously deepen the understanding of his own art and simultaneously be more perceptive to the global functioning of the child. A long path, says Plato, rather than the short one where the master provides readymade answers to the pupil. The student has to do the work by himself, otherwise he will forever look for answers among established authorities, looking up to them rather than searching in himself. Education for autonomy must start at an early age, and it is not through later and immediate injunctions of self determination that the young adult initiates himself into this crucial facet of his existence - as many parents do once they are suddenly faced with what they consider the negative and pervasive influence of the outside world upon their child - but through the process of building confidence in his own capacities to think, produce ideas, deliberate and judge by himself, and this can only be accomplished through early initiation and constant practice.

There are two current objections to such a pedagogical attitude, which are interconnected. The first one is the value argument, and the second one its mirror image, the doubt argument. The basis of the value argument is that children need values in order to construct themselves—landmarks without which they cannot grow and establish themselves as mature and responsible adults, as full human beings. So parents, or teachers, in order to educate, have to directly provide a number of guidelines on the fundamental issues:

right and wrong, good and evil, true and false, beautiful and ugly, forbidden and obligatory, etc. Let us say that adults generally view themselves as the guardians, of certain acquired and inherited principles, composing a rough axiology, of which the fundamentals are not so clear and in fact are often littered with contradictions. But they believe that these are necessary to the children they are responsible for, for a mixture of practical, authority-related and ideological reasons, the differences between which are mostly disregarded. If we insist on the arbitrariness of such child rearing schemes, it is because reason only plays a minor if not absent role. Although it is evidently useful and necessary to instill into children a given set of general statements about global reality, in order that their actions and decisions not be reduced to a case by case, merely instinctive and reactive impulse, let us not forget that all this is designed to give meaning to the world and to their own lives. So if we do not allow the child a space for creating such a meaning, she will become, like many human beings the product of a reductive conditioning, rigid and thoughtless, unless she revolts against such a dogmatic perspective with an equally dogmatic counter-perspective. In this sense, she has both to be introduced to the practice of knowing and using general principles, for existential, moral and intellectual reasons, with a given degree of imposition without which those principles lose their strength; and she needs as well to learn how to analyze, compare, criticize, question and create such general principles. This educational wager—a wager on reason and autonomy--represents of course more time and work on the parts of the adults, a profound involvement that too many parents and teachers are not willing to commit themselves to, for a number of different motives: lack of energy, lack of education, fear, etc.

More or less the same arguments can be used with the claim that doubt is a generator of anguish. Just as protecting a child from any physical challenge won't allow him to develop his physical strength, likewise for his psychic strength. Now, if one conceives responsibility toward the youth primarily as protection against themselves and the outside world, we shall not be surprised that he develops a paranoid world outlook, a world which will never resemble what it is supposed to, a world in which the adult will never be able to intervene, since he has not been introduced to his own potency. How can one be generous and free if he has not undergone the anguish of doubt, and worked on his capacity to deal with it, to accept it, to resolve it and even to love it as the imbalance that maintains his mind and himself alive? Is not the prime symptom of a consumer society the fact that adults are more concerned about satisfying their private little needs than any other great and enthusiastic challenge, an attitude which demands the development trust and confidence throughout time, in spite of the apparent obstacles and difficulties?

Our last point on this issue: children have more a sense of the gratuitous than adults: they know how to play, how to act, to pretend, to assume the "as if," so they probably feel less threatened than their older fellows by the free examination of ideas. The latter have more to lose and to prove: they fear death and absurdity more than they love authenticity, mental life and spiritual endeavor. This is probably the main reason why they feel they have to answer children's questions, why they refuse to admit their ignorance on fundamental issues, why they enforce thoughtless authority. All this, at least in appearance, with the best of all conscience and for the greater good of the children.

Complacency

The third major way in which child questioning and wonder is extinguished is through what can be characterized as a complacent or condescending attitude. The most frequent occurrence of it comes as a response to the child's words that will express itself as something like "Oh! Look at this! It's so cute!" When we say complacent, we mean it both toward the child and toward the adult himself, as a witness of the words and author of the comment. Complacent toward the child, since we do not allow her or encourage her to really listen to herself, to go on with her speech, to come to grips with what she said, to envisage the consequences and implications of her words. She is mainly incited to perform, to please the adult, to be cute, to just throw words around with the hope of some success, a success which takes the form of a gratifying exclamation coming from authority. It is complacent of the adult because he does not really think through what he has heard. Maybe the child's desire was to express something deep and powerful, which is being ridiculed in a certain way, since it is reduced to sweetness and daintiness. And even though she was maybe surprised or caught off guard by the laugh, the smile or the exclamation of the adult, in a second moment she will be happy about it and next time around she will try to obtain a similar success, rather than attempt to express something profound again. When the work and challenge of the adult was here to divine the intent of the child--maybe a quite mind provoking insight like children can have, of the type "But the king is naked!"--or one of those basic long forgotten questions we are so embarrassed by, like "Why are we here ?" Furthermore, his responsibility was to invite the child to go further, a responsibility that implies openness, receptivity, alertness, patience and a minimal dose of rigor. How many teachers discard too easily child talk precisely for those very lacks, when listening attentively could have provided them with clarifications of certain difficulties, or insights on the interpretation of some piece of knowledge? And let us not forget that the "being cute" reaction is the reverse equivalent of the "it's all gibberish." True meaning is overlooked in both cases.

Condescension is a tricky feeling. Why be upset about one who is being nice? For if you feel he has no respect for you in the way he is addressing you, he will oppose his kindness and good intentions toward your person. And what can you answer, if not something like "But you treat

me like a child!" So how goes it with a child? Teen-agers just angrily rebel against this attitude, since words and ideas are failing them, since the feelings of frustration and anger are overwhelming. But the child still operates in a very dependent mode of relationship. He mainly wants to obtain signs of love and appreciation, he is not so worried yet about his own autonomy, at least not on the question of thoughts and ideas. So he will too easily sacrifice a desire to express profound, subtle and impassioned thoughts, an intention which he has not really mastered yet, in favor of pleasing established authority. He feels valorized by these condescending reactions in a more immediate way than by some further questioning or discussion with the adult, unless he has become conscious of his capacities to think and learned to appreciate them and be confident in them. If we observe attentively the constant grin that some adults bear as an indication of welcoming a child talk, any other adult would really feel insulted by it. The frequent smile which for a newborn is a strong and crucial means of expression, can become a hindrance as the child grows older, when he has to be taken seriously.

Loving Kids

Definitely, adults can learn by discussing with children, who by reason of their naïve attitude, still unconditioned, close to the origin, less frightened by general truths and their implications, less constrained by social acceptance, less calculating and cynical, can produce those pearls of wisdom and truth which we adults enjoy so much. To the extent that here and there some theorists will tentatively erect the child as a true master, and as often when a master is set on a pedestal and glorified, the idolaters surrender their own capacity to think; in this case they will give up on their own possibility to confront themselves with the radicality of childhood. They forget too easily that the child himself ignores his childhood: one has to have traveled to know himself and know his own people. The human mind is tricky: it is sufficiently acquainted with itself to be able to feed and flatter its own devious tendencies. Our cunning mind has been trained for so long to interpret the world, give it meaning, adapt its language and its truth in order to feel more comfortable, feel at ease, feel better, and forget its own infirmity and mortality. Be it by crudely not listening to the child, by shutting her up with answers, by smiling or laughing at her childish words, by contemplating and admiring the glossy little self, by falling into the cozy trap of nostalgia: a bare twist of mind stands between utilitarianism, dogmatism, cynicism and romanticism. In all cases, some attitude that will protect our old and weary experienced being from the sparks of primitive genius inadvertently springing from our unconscious youngsters. It is too easy to use those little beings and their ejaculations just to offer our anxious and timorous self a supplement of soul. Don't we resemble those pitiful old Chinese emperors that used to bathe with dozens of adolescent girls in order to

gain some youth and longevity?

We can love children the way the "lady do rightly" loved her poor ones. She would visit their slums every Sunday afternoon, after lunch and before tea, in order to hand out worn-out clothes and install some lace curtains on the battered windows. She would feel good, so good, and this intense feeling of warmth and good conscience would carry her all week long, as she engaged in her mundane, frivolous and meaningless activities. Children can be very mind- provoking, to the extent we provoke their minds. The adult that presents herself as the "facilitator" of a philosophical discussion with children, who does not confront them with their own thinking, will most likely not confront herself: if she does not engage in philosophical activity herself, she will not ensure that children philosophize, if only because children ignore what philosophy is, and its requirements. If she does not find a way to get profoundly involved, an involvement which of course will not necessarily take the same immediate form as the one of the children, the children will most likely not get profoundly involved. After all, she is the teacher, and if the teacher is some kind of spectator, so will the children be, who will participate in the exercise only formally.

Adult are generally satisfied with children, as with any other being or object, when they obtain from them what they expect. This affirmation will sound very harsh to all those adults of "good will." But no matter how good the will is, it is still a will. And this will is diverse. The most classical scheme is the will to see in the child what we have put in him--the return on the investment--and to be satisfied with hearing the echo of our own words, of our own mental mechanics. Be it by listening with a sort of paternalistic nodding of the head, which implies "Go on little boy, go on little girl, participate, express yourself, it's nice to hear you talk, even though I know better and I will tell you at the first occasion." Or be it the straightforward imposition of the right and the wrong, without any patience for anything deviant. Or again, be it by not leaving any space for questioning. The result is the same: the adult does not take the opportunity to philosophize, to problematize his own thinking, and therefore, how can he induce or encourage a philosophical process in the child's mind? But, just as in order to start philosophizing, the adult has to be conscious of his own reasons to philosophize, even more so when he wants to philosophize with children. So his pupils do not become some alibi for his own feeling better. Weirdly enough, becoming conscious of the true nature of philosophizing with children probably requires the avowal of a selfish desire on the part of the teacher, which can only be fulfilled by confronting one's thinking with children thinking, since they provide some natural genius, mixed with the utmost banality, a combination adults cannot provide. We at the same time discover some pearls, if we are able to hear them, and not be so taken up with our own "accomplished" knowledge and competencies. Why not, there are worse ways and conditions to philosophize!

NOTES FROM THE FIELD

Card Games, Roughhousing, Traffic Jams & Thunderstorms

The following discussion was recorded in April 2003 in a second grade classroom at Edgemont School, Montclair, New Jersey. It was one of a series of 16 conversations on the topic of "conflict," conducted in two second grades and two fifth grades, and led by three separate facilitators. This conversation was facilitated by David Kennedy, a faculty member at Montclair State University and staff member of the IAPC.

Classroom Teacher: [He is leading a deep breathing exercise] O.K. We are focused, but . . . [inaudible students. Laughter] What? It's not funny when someone else is hurt. That's why I say sit up. Sorry Paul, sorry [gestures]. Children, be careful. Say sorry, Rasheed.

Rasheed: Sorry! But he keeps on bangin' his head into my head

Classroom Teacher: All right, let's go. Enough.

Facilitator: [after waiting] You remember last week that I had to leave and you guys kept talking? So could somebody raise your hand and summarize how you finished? Because maybe you suddenly went someplace we hadn't been. Alexis?

Alexis: Well I'm not sure, but I think we continued if animals had conflicts.

Facilitator: Yeah. And do you remember, was anything in particular said about that?

Alexis: Like Paul said, and somebody else like the Lion King, and Paul said it's our language, though . . .

Sky: And like I said if an alligator . . [inaudible] like eats—

Facilitator: Yeah, I heard that too.

Sky: They have a conflict.

Facilitator: Yeah, right. So then was something else said after that?

Hope:

Facilitator: You remember? [she shakes her head]. You don't remember.

Sara: Then we talked about if animals are smart.

Facilitator: So you got back into that. [General argument about whether they talked about that]. Jack, you have something?

Jack: Well I disagree with Sara . . . about conflict.

Facilitator: About conflict? So you're going to get us

started again, right? . . . Let's make sure we're paying attention. Paul, are you with us? Are you stable there? Let's makes sure that we listen to Jack, because he's going to start us off again.

Jack: Conflict begins with humans in Egypt . . . Because there's cobras and stuff . . . Cobras, rattlers . . .

Facilitator: So you're saying that there's conflict between animals and humans in Egypt? That's an interesting idea—the idea of conflict between animals and humans. Rasheed, can you say more about that?

Rasheed: I can . . . Well especially with the dogs too, because like every time . . . dog . . Some dog that pull you across to another dog and start playing and sometimes they get a *girlfriend*. [Paul and Rasheed grin]

Mimi: [also smiling] His dog always tries to get a girlfriend, and his Mom tries to pull the Rotweiler away and he keeps on going back and . . .

Facilitator: So this is a conflict between humans and animals.

Mimi: Yeah [then raises her hand to say something else, Facilitator says "Yeah?" and she is silent]

Facilitator: O.K., it slipped away . .

Mimi: Yeah. Could you come back to me? Facilitator: Yeah, I'll come back to you.

Patricia: Sometimes my fish. . . Well my fish is a fighting fish, so . . . Sometimes she likes to bump into the glass.

Mimi: Well sometimes when my Mom picks me up, Sara's dog and Charlotte's dog.. I see them sometimes, like Kep jumps on Patsy. And sometimes when dogs meet other dogs they kind of.... Every time my Mom picks me up I see Kep and Patsy fight!

Facilitator: I'm gonna jump now. Julie? I'd like to try to refocus. [Several speaking]

Classroom Teacher: Sara, stop. . . Shhhhh. Children! Facilitator: I'd like to try to refocus on conflict by doing an exercise and this is an exercise using examples. [a hand is raised] No, I'm gonna do this exercise now. And I'm gonna call on people and ask them to answer and they'll make a response—it's not about a right or a wrong answer, it's just about how you connect the example that I give you with this idea of conflict—and then we'll discuss that particular example the way we usually do . . . Um, so I'm gonna ask you whether these things are examples of conflict

and if they are, how. So Mary, I'm gonna start with you and ask you whether you think a card game is an example of conflict.

Mary: Yes.

Facilitator: Could you say how it's an example of con-

Mary: Um, the game—like the other side, like the person is fighting against you to win the game.

Facilitator: It's a fight. I mean, nobody's getting angry hopefully, but it's still a fight. Rasheed, do you agree that a card game is an example of conflict?

Rasheed: Yeah . . . And sometimes my sister gets two jokers and I just lose, and I have a conflict.

Facilitator: What's that conflict, Rasheed?

Rasheed: Every time the joker . . . [inaudible] and the colored joker could be the non-colored joker and like when they're two jokers they could just beat like everything.

Facilitator: So you're saying that losing is a conflict. So would you generalize from that to say that anything you're doing where there's a winner and a loser is a conflict?

Paul: Well... I don't think like all card games, not every one, like take like, like for Casino and Budge, where you're playing against, and against is really what conflict is, but in like Free Cell, Solitaire you play against yourself, but you play by yourself, not really against, to try to do something. So it's like you're trying to challenge yourself and like have a goal so it could be conflict with either one, but more conflict with someone else.

Facilitator: So you could set up a conflict with yourself. That's a nice distinction. Let me go to another one—we could keep card games in mind. Let me give this one to Maria—tell me if a friendly wrestling match—you know, when you're roughhousing on the floor—let's say that you're not mad, you're just playing. Would you call that a conflict?

Maria: No.

Facilitator: Does everybody agree? Hope?

Hope: I agree with Maria because my dog, he plays

[inaudible]

Alexis: Well sometimes like humans that have dogs they wrestle with them, but just friendly, they wrestle with them and stuff and the dogs get all excited with them and stuff, so it's like friendly roughhousing.

Facilitator: Not conflict. If somebody disagrees I-

Shelly: I do!

Facilitator: Shelly, you disagree.

Shelly: My dog, when it . . . somebody. Well it doesn't fight . . . When it wrestles it means it . . . It's mad, it means

Facilitator: It means it.

Shelly: Yeah but most of the time it's friendly and nice. Facilitator: Isaiah, you want to comment on that? Isaiah: Well I disagree with you because, because um, yeah, because if you're wrestling for fun like with your dog, yeah it's not a conflict but if it's a board games or something like that, you want to win---one person wants to win

and the other person wants to win. So I'm disagreeing with

Facilitator: What are you disagreeing with? What did I say?

Isaiah: You said that play is not a conflict.

Facilitator: Oh, all right, I take your point. So a card game is play and it is conflict, so play can be conflict. . . . Julie? Don't talk to me, talk to the whole group, O.K.? I'm not in a very strategic position—Carli, if you could back up a little. . . The question was about roughhousing.

Julie: Roughhousing? I always wrestle with my Dad. But my Dad gets . . . [description of her brother's play with their

[Paul raises his hand]

Facilitator: Paul, we're working with, we've got two kinds of examples, and Isaiah has pointed out that something which is play can be conflict. So we're still talking about . . .

Paul: I disagree a little bit with everybody except for Isaiah when he said that play is like when you're playing a card game . . . I agree—I disagree because roughhousing couldn't be a conflict because if you don't try—because roughhousing is about trying to get the other person even if you're not mad, and if you don't try to get the other person then if both sides don't try to get the other person, you'd just be standing still and that wouldn't be roughhousing. If you do roughhousing there has to be a conflict or else you'll be standing still and you won't be roughhousing.

Facilitator: You're saying that even in friendly roughhousing you have to have a winner or a loser.

Paul: Well not really a winner or a loser but conflict is like trying to get the other person, if you don't try to do that you won't really be roughhousing, you'll just be like standing still and if you don't have conflict then both of you will be standing still, so . . .

Facilitator: O.K., so you're saying that . . . Anything which involves winner or loser—trying to get the best of another person—even if it's just in fun, is conflict. So you're saying by definition that's conflict.

Paul: Yeah.

Facilitator: So you could have a friendly conflict? Sara? Sara: Well I think that . . . What's the question? When you're playing . . .

Facilitator: Well let's summarize.

Paul: It depends on what kind of friendly you mean. Sara: Oh oh oh. When um . . . When we had snow days, when I was playing outside with my sister, it's like she doesn't mean to get really rough, but she does.

Facilitator: All right.

Sara: And she buries me in the snow and I can't breath . . . So I think that . . .

Facilitator: Yeah, and that's a good example because sometimes when you're play-wrestling it goes wrong, right? And suddenly you go over the edge and you're mad. Alexis: Yeah I think you should be really careful, 'cause sometimes you're just playing and then it turns into a real

conflict and then you get really rough and people don't really mean it and people get mad and stuff.

Mimi: And people get hurt when they don't really mean it 'cause then the game gets *rough*.

Facilitator: Yeah, O.K., I want to give another example here, to somebody who hasn't had a chance yet. And I want to ask John whether a traffic jam is a conflict.

John: I don't think it's a conflict because you can't stop a traffic jam Because it just keeps on going—so many cars

Facilitator: So it's not a conflict . . . Somebody want to comment on John's response?

Paula: Well I think a traffic jam is a conflict, because my Mom yells out the window and stuff.. [inaudible].. "Get going!" and things like that because it's a green light and people are just sitting there... [class laughter]

Facilitator: So you're saying it's a conflict because people are feeling angry. Somebody want to comment on Paula's example? She says it's a conflict because it makes people upset . . . Let's wait until everybody's listening and paying attention to the next speaker . . .O.K. Hope, what did you . . .

Hope: Well I agree with Paula because once my Dad when he's like walking on the sidewalk and a car comes by that's going too fast he yells at the car, like "slow down!"

Isaiah: I disagree with John.

Facilitator: How so.

Isaiah: Well because . . Well a conflict—some conflicts

can't stop.

Facilitator: Cannot stop.

Isaiah: Yeah, so a conflict doesn't mean an argument that you can stop.

Paul: But you can stop a traffic jam.

Isaiah: No you can't... Well you can.. Like if you're going on the Lincoln Tunnel to New York. And there's traffic there, and there's a narrow place, and right below there it's just like a canyon and so nobody can stop it because it's too narrow and dangerous.

Facilitator: Oh, but actually the point you were addressing is John's assumption that a conflict is something you can stop. And that's what you heard him saying, that a conflict is something you can stop and you can't stop a traffic jam and therefore a traffic jam is not a conflict. Do you still hold to that John? That a conflict is something you cannot stop?

John: You can't prevent cars from coming on.

Facilitator: O.K., I mixed it up. You're saying that a conflict is something that can be stopped and therefore this is not a conflict.

Isaiah: No, wait, he said that if you can't stop it, it's not a conflict. But I said if you can't stop it it's a conflict. Either way—if you can or cannot.

Facilitator: It has nothing to do with whether you call it a conflict or not, because some can be stopped and some

can't. O.K., let me get . . . [nods to Alexis]

Alexis: Yeah, traffic jams can be really bad—not really

bad, but it can be conflict—because, because some parents yell out the window cursing and stuff [class laughter] because it's like you want people to go—like "go already!" So that can lead to a very bad conflict with words.

Facilitator: O.K. But I just wanted to say a traffic jam in and of itself without people's reactions to it or how it makes you feel. Could you call that a conflict?

Alexis: Yes.

Facilitator: Could you say why? I mean apart from people yelling out the window and stuff.

Alexis: Because it's really annoying, because you want these people to go already! It's like Paula said, it's a green light and no one won't go. It's like it's a green light, go! Facilitator: O.K., but that's still people's reaction. I'm just trying to talk about the thing in itself.

Paul: I disagree with you because I think that any traffic jam is people's reactions. Because what leads to a traffic jam is people's reactions—like say there's a traffic jam because people got into a car accident. It's the people's reactions that made them get into a car accident. Or say people are building something—the people are using their own reactions to build it. So there won't be a traffic jam unless people used their reactions—then there wouldn't be a traffic jam because what causes a traffic jam is caused by people's reactions.

Facilitator: O.K.

Paul: So you can't say just "in itself." Traffic jams are caused by people's reactions.

Facilitator: O.K. Let's try another example to sort of test what... said, because I'd like to say you're looking at it from the sky from a helicopter say, and you're looking down at this traffic jam and you would say—not even thinking about all the people in those cars—you'd just be looking at all the cars stuck—and you wouldn't say this is a conflict?

Paul: But it is a conflict.

Facilitator: But it's caused by people—people being in conflict.

Paul: Yeah, it's not caused by the traffic jam itself, it's caused by the people.

Facilitator: O.K., I think I understand that, but let's try another example now—Sara and Maria, I'll let you comment on this next example, but I want to call on somebody who hasn't had a chance . . . is that . . Ophelia? Ophelia, do you want to comment on this next example?

Ophelia: Yeah.

Facilitator: What about a huge thunderstorm? Would you call that a conflict?

Ophelia: No.

Facilitator: Could you say why?

Ophelia: Because no one's fighting.

Facilitator: Because no one's fighting. Is that what you

said?

Ophelia: Yeah.

Facilitator: O.K. So Ophelia says that as conflict involves people fighting? Julie, you want to disagree?

Julie: Yeah, it is a conflict because when it's a stormy night my Mom always says, "I want the storm to go away." So it's a conflict because she hates storms.

Facilitator: O.K. Hold on a minute Paul, let's . . . Sara. you've had your hand up for about three days.

Sara: I agree with Ophelia because I think a thunderstorm is not a conflict. A thunderstorm . . . People don't have to have a conflict with a thunderstorm, like in my family they just ignore the thunderstorm.

Facilitator: O.K. And Julie is saying it's a conflict because it makes people upset. Shelly?

Shelly: I agree with Sara and Ophelia because well . . . it's

not like you can stop it, and like conflict—you can stop that.

Facilitator: So we're back with John's point.

Shelly: Yeah. If you're in a traffic jam then the person can just go-you can stop the traffic jam, but like . . .

Paul: I disagree with everybody that said about thunderstorms, because—it can half be . . . because the conflict—if you're just talking about the thunderstorm itself, like, like the, the thunder and the lightening.

Facilitator: Right. That's what I'm talking about.

Paul: Well the storm couldn't be the things that had a conflict, like plants or animals or people. But itself isn't a conflict. Because I think conflict is made by the living things like for example two computers, like they both have a virus and could like fight over electricity, but they can't have a conflict knowing it like we have a conflict knowing it, and so like a thunderstorm isn't really a conflict--like the thunder and the lightening, how could they have a conflict if

they don't know you can't have a conflict—they're like just making sounds and making like things that you can seelike it's not a conflict—but they can lead to conflict, but they're not conflict themselves.

Facilitator: Does someone want to respond particularly to that, because if they don't I want to—I want to give a reason. Particularly to Paul's point—he's being very clear. He's saying, you cannot call a non-human event a conflict. Paul: Or non-living thing, because like animals aren't human.

Facilitator: O.K.

Paul: Because like plants aren't human, but . . . Facilitator: But plants can have conflicts.

Paul: Yeah, they can. Like some plants like, like tangle up each other because they try to get more sunlight and some trees do that to other trees and they spread their roots and tangle around the other tree.

Facilitator: O.K. We've got to finish up because we're already late here, but this is kind of winding down not but can somebody speak to Paul's point-Rasheed, can you speak directly to Paul's point?

Rasheed: I agree with him too because I do have a conflict with the computer, because sometimes like in ... I get a conflict because . . . sometimes they just knock the ball

> Paul: But how does that agree or disagree?

Facilitator: Rasheed, can you respond? Do you hear what he's saying?

Rasheed: Well I actually agree with you because you say you can't have a conflict with another computer. Didn't you say that?

Facilitator: He said two computers couldn't have a conflict.

Paul: And you're not a computer. I never said a person and a computer could have a conflict.

Rasheed: Well you're doing it with the computer aren't you? **Paul:** But that's not having a conflict with the computer. That's like having a conflict with your mind.

Sara: You can have a conflict with yourself and a computer.

Paul: O.K., but the computer doesn't know-it's not saying "I'm gonna do this and do this, it just ..." [inaudible]

[Eruption of voices]

Facilitator: O.K., wait, hold on guys . . . There are two things.

We've got to close down and this is probably selfish of me but I want to just offer the possibility—like a don't disagree with Paul, but I'm not sure that he's taking everything into account, because I want to say, and I can't do this right but I want to say that a thunderstorm involves a conflict of elements, like hot air and cold air rushing toward each other-I don't know enough about weather to be able to describe this so this is my belief that maybe we could say that the elements themselves—the hot, the cold, the wet, the dry, the high and the low, the dense and the . . . are somehow . . .in conflict.

Rasheed: [Inaudible] [More voices]; CUT



Ecodialogo, Environmental Education and Philosophical Dialogue

MANUELA GÓMEZ & IRENE DE PUIG

ECODIALOGO is one of the outcomes of a project developed in the framework of an European Community's Socrates program in the field of education. The objective of ECODIALOGO is to strengthen environmental education in primary and secondary school by means of philosophical reflection grounded upon interdisciplinary and intercultural foundations.

Philosophy and Environmental Education

n order to address environmental questions in schools, specific knowledge of the environment and its dynamics is essential. In this respect, the sciences are indispensable in their capacity for introducing students to knowledge of nature. But, in addition, children can be invited to reflect upon and reason about the foundations and conditions of this knowledge, as well as its ethical, social, logical, metaphysical, epistemological and aesthetic dimensions.

Philosophy helps us clarify questions which have no single, definitive answer. These questions should be constantly revised in light of the changes and needs which come up on a day-to-day basis. These are controversial and generic questions that no scientific discipline is capable of addressing. Some of these questions are major concepts from philosophical tradition, for example: nature and culture, life and death, permanence and change, reality and appearance, truth and beauty, knowledge and language, free will and determinism, freedom and responsibility, etc. These questions are transcendental in human life because

Irene de Puig (grupiref@grupiref.org) is Professor of Philosophy and Director of Grup IREF. Manuela Gómez (grupiref@grupiref.org) is Professor of Philosophy and Coordinator of Grup IREF. The Grup IREF has been translating and adapting the P4C Curriculum into Catalan and training teachers for sixteen years. It has also developed materials for preschool level and first readers on P4C, including Eduarts (Arts & Education), Conta'm & Conta (Traditional Stories for Children & Reflective Thinking), and Ecodialogo (Environmental Education & Philosophical Dialogue).

we live within them; that is, the meaning of our lives depends upon the meaning we afford these concepts.

At the same time, philosophy seeks to oblige us to question ideas that we tend to accept as true, stressing the need for us to give attention to those aspects which heretofore we have found adequate or which we simply had not thought about.

Environmental education, in our view, requires ethical reflection, responding not only to the need for values and limits in a world in which almost anything is possible but which is also the realm in which the vulnerability of our conceptions of the world manifests itself. In this respect, ethical reflection is philosophical reflection. That is: the desire for a rational model to look to and to refer to when dealing with the fragmented issues we are obliged to confront.

The relationship that humans maintain with the environment is measured by ideas, by conceptions of the world, either passed down or personally constructed. In this sense, ideas constitute the human environment. Thinking in a specific way about the environment, and about our relationship with it, forces us to act in consequence. To work with the environment is, then, to work with ideas.

Therefore we suggest consideration of the relationship between philosophical dialogue and environmental education. To promote dialogue in education implies creating the conditions under which children participate in conversations which take the form of investigation disciplined by logic and metacognitive considerations. Some examples of the latter are: What is our relationship with nature? How do we know that a statement is true?; What makes one reason better than another? Is it possible for certain behavior to be at the same time legal and wrong? On the basis of what criteria is A better than B? etc.

Primary education might seem too early an age to bring up these fundamental questions. But it is by this age that children have built up their own extensive network of hypotheses and theories by which they explain to themselves how the world works. They use terms such as *true*, *good*, *fair*, *beautiful* and *respect*, but rarely in school do they reflect on the meaning and use of those terms.

Moreover, at this stage of habit formation students should experience for themselves what it is like to investigate through dialogue in an atmosphere of intellectual cooperation and mutual respect. We hold that this practice is a necessary condition for the education of future citizens capable of cooperation, investigation and dialogue with regard to the relationship they want and which is possible to maintain with the natural environment.

The Educational Proposal of *Philosophy for Children* (P4C)

According to Matthew Lipman, philosophy is not only theory but practice as well. Philosophy is done in conjunction with theory which includes its practice. In this respect, improving thought implies practice. Thinking, as an activity, entails a broad range of intellectual movements. For these movements to become habitual continual exercise is required. Thus, *Philosophy for Children* proposes to convert the classroom into a community of philosophical inquiry.

The members of a *community* of inquiry teach one another, and that implies respecting and recognizing the contributions of each member of the group: different perspectives on a theme, intellectual style, experience, correcting arguments, etc. This is, therefore, a matter of establishing a climate of mutual trust which permits dialogue.

In this sense, the community of investigation enables the students to experience what it is like to live in a context of mutual respect, disciplined dialogue and cooperative investigation free from arbitrariness and manipulation. Such a model permits the direct practice of attitudes, values and procedures at the core of the concept of ecology: interrelation of all parts for the equilibrium of the whole, preservation of what is of value, confronting challenges which require thinking in terms of a model of sustainable development which respects the natural environment and is social equitable and caring with the planet as a whole and with future generations.

Promoting philosophical *inquiry* requires practice in a great number of thinking skills while developing a series of attitudes, incorporated in the dynamics of dialogue and investigation. For example: making explicit the reasons upon which our opinions are based, contrasting our thinking with experience, being open to correction of our judgments, discovering the implications and consequences of our own points of view and those of others, formulating questions, formulating hypotheses, clarifying concepts, taking into account all aspects of a situation when making a judgment, providing examples, using logical criteria, etc.

In-class *dialogue* is non-competitive and does not imply some adhering to the opinions of others. Agreements are not quantified. Rather, based upon the questions posed by the members of the group, an effort is made to clarify ques-

tions, examine concepts, seek out examples, contribute evidence, employ solid reasoning, etc. A great number of skills are orchestrated when they are put into practice in contextualised form.

Philosophy for Children is a curriculum rich in philosophical content, including themes such as nature and the relationship between humans and nature. These questions are specifically addressed in the philosophical novel for the student, Kio and Gus, and a teacher's manual, Wondering at the World. This program has inspired many of the themes and philosophical exercises found in the ECODIALOGO activities. In ECODIALOGO we offer a number of exercises from the teacher's manual Wondering at the World to enrich the proposed activities.

Environmental Education Subject Matter

In order to foster philosophical dialogue in the classroom we offer examples of activities which seek to link the exercise of thinking skills and reflection on values. The contents of these activities are based on a four-fold classification: Land, Water, Fire and Air. This is the classification passed on to us by ancient authors (Empedocles, 5th century BC, for example) who viewed the cosmos as an order made up of these four primary elements from which all other things emerge.

From the environmental perspective, we avail ourselves of this simple but clear division in addressing both scientific and ethical questions. The subject matter of environmental education pertains to a realm of social awareness and must be dealt with by the individual. Children come to know the natural environment directly through their own experiences and observations, as well as through the media and the attitudes and behavior of adults. Children are capable of showing concern and of taking actions directed at the future with respect to an environment susceptible to damage and destruction.

Human beings have always changed the environment. Indeed one of the tasks that characterizes human activity is that of "domesticating" nature, considered wild and untamed. Nevertheless, these changes, which occurred slowly over the course of thousands of years, in recent years have accelerated at a dizzying pace, producing a negative imbalance which is endangering human survival on Earth. This situation has led us to think for the first time of the need to promote awareness and urgent action on environmental problems, in consequence of our interference in our environment. Among the most serious problems are: air pollution, climatic change, the depletion of non-renewable resources, loss of biodiversity, the destruction of the ozone layer, etc.

The environment, in addition to being nature, encompasses all that forms part of our relationship with our surroundings, both natural and cultural. In this respect, buildings, parks, streets and anything else inherent to the urban setting form what is often our most immediate environment.

Resources from the Art World: Painting, Literature and Music

The proposed activities presuppose a relationship between ethics and aesthetics. We have taken this relationship as a framework for reflection through observation of and dialogue about pictorial works. As a form of knowledge, art provides us with access to the meaning of complex concepts and problems through perception, imagination and empathy. Thus, it facilitates work based upon children's experiences and questions. Art is an intercultural language and it can be dealt with in an interdisciplinary manner.

This work does not strive to be exhaustive, but it does seek to serve as an interdisciplinary guide to the fundamental idea and the types of exercises and activities proposed. That is to say, the exercises and works presented do not comprise a fixed body of materials; rather the educator may add to and enrich them, creating his or her own exercises and proposing other works which are more suitable to the specific environment, or more easily available.

We propose observing a number of images which, dealing with different aspects of environment have been handed down to us by the history of painting and which serve as a starting point for environmental reflection. If we bear in mind that other paintings may be used and that the exercises serve as a model for manifold application, the possibilities for the proposed activities are greatly multiplied.

In each element (Earth, Air, Fire and Water) we find ten thematic aspects.

Contents Thinking Skills/ Exercises

Supposing

EARTH1. Earth

2. Living organisms Perceiving differences 3. Inanimate matter Classifying 4. Ecosystems Relating 5. Nature reserves Distinguishing causes & objectives 6. Landscapes Describing Assessing differences 7. Crops 8. Waste Ascertaining 9. Natural resources Using criteria Identifying assumptions 10. Consumption

WATER

1.	Water	Inferring
2.	Water cycle	Detecting cause and effects
3.	Water is essential	Distinguishing causes &
	for life	reasons
4.	Sea	Giving reasons
5.	Rivers	Working with analogies
6.	The rain	Classifying: kinds and degrees

7.	Fishes	Detecting ambiguities
8.	Water, a good in	Working with means & ends
	danger	
9.	The saving of water	Estimating consequences
10.	Life near the sea,	Establishing similarities &
	life in the inner	differences

FIRE 1 Fire

I. FIIE	Observing
2. Energy	Identifying problems
3. Light	Analyzing metaphors & similes
4. Heat	Using conditionals
5. Temperature	Generalizing
6. The sun	Relating facts and values
7. Use of solar energy	Defining terms
8. Destructive fires	Contextualising
9. Incinerators	Weighing
10. Smoke	Detecting fallacies

Ohearving

AIR

1. Air	Using precise concepts
2. Wind as energy	Ordering concepts
3. The sky	Thinking about possibilities
4. The atmosphere	Questioning
5. Air pollution	Relating parts with the whole
6. Flying	Identifying criteria
7. Breathing	Formulating questions
8. Oxygen	Arranging in series
9. Sound	Using aesthetic criteria
10. Noise	Giving examples
	•

An Example From ECODIALOGO How To Use ECODIALOGO

For each of the forty thematic aspects, we propose a pictorial work.. The proposed works are "texts" for contemplation and dialogue, with the aim of fostering reflection and comprehension.

The explanations accompanying each image are for the teacher, and it is up to the latter to decide how and at which point in the dialogue to introduce a certain explanation and activity. The goal is not to offer master explanations and pose questions so that the students learn the answers, but rather to facilitate dialogue and investigation so that the group might progress in the comprehension and clarification of the questions posed by the group.

Below we offer a few general questions as an aid to exploring each painting and promoting dialogue among the students regarding the various works. Based upon the questions and comments that emerge, the teacher should encourage students to discuss their points of view, to remain open to correction when faced with evidence or explanations better than their own and, finally, to build a community of inquiry.

Some basic questions to start with

1. What do you see? (describe colours, shapes, figures, layout of the shapes, atmosphere)	Observe, describe
2. What does what you see suggest to you? What could be there, though we do not see it? (Smells, sounds, temperature, moods, life of the characters, place, time)	Infer, relate, imagine, formulate hypotheses
3. What themes do you relate the painting to? (season, a period of life, a social theme, something of value,)	Thematize, analyze and synthesize
4. Do you have any personal experience which Makes you think of something in the painting?	Experience, relate with, and in the memory, exemplify
5. What does this painting tell us about? (water, earth, oxygen, fire, consumption)	Infer, thematize, relate
6. Is there anything that surprises you in this Painting?	Question, problematize
7. Does it make you ask any questions?	Formulate questions
8. How can you respond to these questions?	Find out, seek in experience, reason, exemplify, etc.
9. Where could you find more information?	Investigate
10. What title would you give this painting?	Synthesize

Participants

Daniela Camhy. Austrian Center of Philosophy for Children, Graz, Austria.

M. José Figueroa Rego. Centro Ménon, Lisboa, Portugal.

Manuela Gómez Irene de Puig. *GrupIREF* (Innovation and Research for the Teaching of Philosophy), Barcelona, Spain.

Coordinated by Manuela Gómez and Irene de Puig, from GrupIREF grupiref@grupiref.org



Introducing Asian Philosophy and Concepts Into the Community of Inquiry

LIM TOCK KENG

Introduction

"Through philosophy for children I found the world an open book full of mysteries.

These mysteries are the everyday questions asked by anyone and everyone alike: Why should we be good?, Why is there so much suffering?... People are often misled by concepts and ideas which are held by the crowd, they may have their own ideas, but because they want to fit into that crowd they allow themselves to be influenced by them. Philosophy for children discussions offer opportunities for us to examine these concepts and ideas so that we would be able to think for ourselves what right or wrong and also help us develop an opinion about these issues."

Ru-Tian, student of Raffles Girls' Secondary

he Philosophy for Children (P4C) programme was initiated in Singapore in 1992 to teach students how to think so as to make use of their present knowledge as well as harness future knowledge. Singapore is a small city state with a population of around 4 million people, with no other natural resources except for its people. It has a strong education system that is recognised for having produced high levels of achievements. However, as Singapore prepares itself for the challenges of the competitive world of the 21st century, teaching students critical thinking skills in programmes such as the P4C would be important.

In addition, Singapore is an open society that is vulnerable to external influence. The six to seven million foreign visitors (less than twice that of its population) passing through Singapore every year will definitely expose Singaporeans to some external influence. Other influences come from books, magazines, tapes, television programmes, and the internet. The openness has put Singaporeans, brought up in English-medium schools (English being the language of

education, government, administration, finance and business), in close touch with new ideas and technologies from abroad. However, it has also exposed them to westernised lifestyles and values, away from the traditional Asian values of duty and society (Singapore, 1991). In response to this, we are attempting to introduce Asian philosophy and concepts to the P4C programme.

Henry Park Primary and Raffles Girls' Secondary came into the P4C programme in 1993, and Nanyang Primary started the programme in 1995. The programme in Henry Park and Raffles Girls' have been indigenized to include Asian philosophy and concepts. In Henry Park, we have introduced many interesting stories, from folk tales, local stories, as well as comics on Confucius and Lao Tzu. These stories are used to make the students aware of family values. Raffles Girls' has gone into a study of values, moral philosophy and world religions. Local stories and Asian American stories are used to stimulate the students to discuss and reflect on values and moral philosophy (Lim, 1997). The poems, stories and comics reflect traditions, rules, rights and obligations present in an Asian society, and provide students with opportunities to probe into these philosophical concepts in a classroom community of inquiry. The students can examine ambiguity and deal with contradictions when they analyse the stories. Hopefully, while exploring alternatives for themselves, they will acquire a capacity for reflective and balanced judgement.

Experiences in Henry Park Primary

Initially, the Henry Park teachers used 'Pixie' (Lipman, 1981) and the accompanying manual (Lipman & Sharp, 1982) as the resource materials to initiate discussion in the P4C sessions. The Henry Park teachers felt a little apprehensive as they were unsure how they can facilitate dialogue without being perceived as to be imposing their views and controlling the flow of the discussion. The pupils too found it difficult to give reasons to support their statements or to follow up on a discussion. However, after they have

Tock Keng Lim (lim_tk@pacific.net.sg) is currently a visiting professor at the University of Munich (LMU), teaching for one year in the MA program in Psychology of Excellence.

got use to the P4C sessions, they tended to be argumentative and to give reasons to win the debate without listening to the views of the other pupils (Lim & Loo, 1995). Only after a year or so did the pupils gradually learnt what it was to be engaged in dialogue and to listen to the points of view put across by other pupils.

In the second year of the programme, the teachers introduced stories from 'Thinking Stories I and II ' (Cam, 1993; 1994) to supplement 'Pixie'. One of the stories 'The Knife' gave the teachers the opportunities to initiate dialogue on philosophical concepts such as lying, stealing, friendship, telling the truth, and justice. In 1996, as the teachers became more confident in facilitating P4C sessions, we explored local and Asian stimulus materials focusing on the theme of Family Values. This theme was in line with Singapore's proclaimed set of four key shared values--Placing society above self, Upholding the family as the basic build-

ing block of society, Resolving major issues through consensus, and Stressing racial and religious harmony.

Utilising stories such as 'The Old Jar' (Yep, 1989), 'Eggs' from Lim (1978), and 'The Sayings of Confucius' (Tsai, 1991) from the Asiapac Comics Series, the Henry Park teachers focused on relationships within the family, family piety, greed, trust, responsibility, sibling rivalry and respect for

1997).

the jar for something much more valuable. However, she refused. The villagers all jeered at her as she was dragging a large jar home to keep a tiny quantity of rice. The next day, the old lady discovered that the jar was magic! No matter how much rice she removed from the jar, three bowls of rice she used to have always remained. The old lady never went hungry again.

The Henry Park students were able to relate to this story as many Chinese folk tales involved "magic." They could deliberate on whether there was such a thing as magic and whether objects useful in one context could be a hindrance in another. In the context of Singapore's "greying population", it was also important to contemplate the usefulness of senior citizens, the role of grandparents in a Singaporean family, and measures that could ensure the health and happiness of the old.

'Eggs' is a story of a girl and her mother who lived with her aunt and cousins. Her aunt looked down on her and her mother because they were poor. The girl's cousins had good food to eat and the poor girl was very envious of them. To her, an egg was a luxury and she often begged her mother to get her one. Her mother refused because she felt

that people of their background should be resigned to their fate. However, one day, the girl's mother returned home with six eggs, and told the girl that she had to finish all the eggs because they were expensive. The girl ate until she was on the verge of vomiting. She wondered why her mother forced her to eat all the eggs when, all along, she had refused to buy any. The girl then decided that eggs were unlucky for her and she would not to have anything to do with eggs from then on.

'The Old Jar' is a Chinese "fairy" tale about an old woman who was extremely poor. As she was old, she could no longer work and had to live on her savings until they dwindled to almost nothing: three bowls of rice and a few coins. Unfortunately, she broke the container for the rice and had to go to town to use her few coins to buy a jar to protect her rice from mice. In town, a merchant gave her a large jar with a crack down the side. She started rolling it back to her house. On the way, she met several people who offered to exchange

elders. The stories allowed the students to examine general

issues such as: What is it to be a child within a family?

sibling rivalry? Who are our elders? (Khor, Lim & Au,

What is the meaning of filial piety? How can we resolve

The students discussed why they thought the mother in this story did not have much hope for 'people of their background' and whether that was the same as being contented with what one had. Very often, students might find that they wanted something badly, but when they finally got what they wanted, it was not as good as they thought. They then explored why this could happen. It was also important for the students to realise that no matter how advanced Singapore became, there were bound to be some less fortunate people such as the poor and the handicapped. Would it be our responsibility to look after them? What could the students do to help the less fortunate around us? How far should they go in helping them?

Experiences in Raffles Girls Secondary

In 1995, RGS embarked on the use of Asian materials within its P4C programme to involve moral philosophy and ethics. The RGS programme looked at moral concepts, morality, ethics, religion, and human affairs. Stimulus for discussion include materials on the different religious traditions (Christianity, Islam, Hinduism, Buddhism and Taoism), as well as Asian-American and Singaporean stories and poems. The discussion in these P4C sessions are usually organised around case studies, progressing from clear cut to fuzzy instances, from particular to universal. The students are also expected to learn how to distinguish testimony from evidence.

and 'wrong'? What is the nature of God? What happens after death?" (Tan, Lim & Lim, 1997)

In Human Affairs and Social Issues, Asian-American short stories and poems are used to introduce concepts that the girls could relate to. Both Asian-Americans and Singaporeans have a migrant history, and with modernisation, both have to face the consequences of westernization. The main characters in the stories discussed are teenagers or young adults with concerns similar to the RGS girls. Discussion was sparked using both *Breaking Traditions*

(Mirikitani, 1993) and The Joy Luck Club (Tan, 1989). 'Breaking Tradition' is a poem dealing with the relationship between an Asian-American mother and her teenage daughter. The Joy Luck Club is a novel about the problems experienced by four sets of Chinese mothers and daughters living in United States. The problems arose due to differing mindsets of the mother and the daughter. The novel also detailed the resolution of these problems. **Breaking Traditions** raised issues such as rebellion, liberation from the tyrannical hold of tradition on women, the westernised Asian teenager asserting her

individuality, and the generation gap:

Questions discussed within Moral Philosophy and Ethics included: What are morals? Why be moral? Is it important or necessary to be moral? How does one become moral? Are we born inclined to good or evil? Can one be a moral person without religion? The RGS girls were encouraged to read about the main religious traditions in Singapore and to come up with questions and observations. An examination of these religious traditions would help the students be aware that underlying the apparent differences, these different traditions addressed similar moral concerns. Most addressed issues such as "What is the meaning of human life? Who am I? What is the difference between 'right'

Rebellion: 'My daughter denies she is like me,' 'I deny I am like my mother.'

Liberation from the tyrannical hold of tradition on women: 'She reveals the hatreds of womanhood already veiled behind music and smoke.'

The westernized Asian teenager asserting her individuality: 'her pouting ruby lips, her skirts swaying to Salsa ... her thighs displayed in carnivals of colour.' The generation gap: 'I do not know the contents of her room.'

The RGS students considered how, in every generation, there would be traditions "to break" and transitions to be made. They noted the similarities between the way that Mirikitani regards her own mother and the way she perceives her daughter. There was also an implied similarity between the way mothers regard their daughters, and the manner which each generation expressed the need to "break traditions". Questions discussed included: What's the message conveyed in this poem with regard to tradition and Asian womanhood? Is the daughter justified in distancing herself from her mother?

A Singaporean short story 'Fascist Rock' (Tham, 1990) deals with teenage angst and rebellion. The main character is Christina, a girl of 17 and studying in a junior college. She is a rebel, dressed in black gear:

"Did she think she was a rebel? She had once been asked by a reporter?"

No, she wasn't a rebel.

No, then why the dressing-up? Why the all-black gear?

"To get up people's noses. To intimidate. People were intimidated by black lipstick.

"You know what I would like to do?" Chris said abstractedly, thinking aloud. "Get a spray can and spray 'Fascist' on every wall in school."

Kai regarded her seriously. "Why?"

Chris unclasped her hands. 'Teachers are fascists, that's why. I mean, they have almost unlimited power to palm their opinions onto us and be petty tyrants if they want to. Who's to stop them? Certainly not us."

The teachers raised questions such as: Why do people rebel and why is Christina considered a rebel? The students raised the following questions: how can people like Chris, who believed that nothing exists after death, be motivated and encouraged to behave well in this life? What is the difference between intimidation and rebellion? Why do people stereotype? Kai and his group of friends are rebels. Kai is different from them in the sense that he does not choose to express his rebellion through clothes. However, which kind of rebel will be able to get people to listen to him and his ideas, Kai or his friends? Is it necessary for us to conform?

Conclusion

Feedback from the Henry Park students on the P4C sessions on Family Values, indicated that the pupils are beginning to appreciate the meaning of these values, and they see the need to practise these values in their daily lives. The process of community inquiry on family values with stories such as 'The Old Jar' and 'Eggs' will help the students to develop respect, tolerance, sensitivity, mutual co-operation, trust, fair mindedness and a heightened degree of sensitivity to others.

As inculcation of values cannot be done in a vacuum, RGS would like to create an environment in P4C for her students to think, discuss, question and reflect on moral issues and moral consciousness. Values are important, but for an individual to see it as meaningful, the values cannot be accepted blindly. The process of the community of inquiry in P4C would thus help to promote the development of respect, tolerance, and sensitivity which are essential behavioural attributes in a multicultural Singapore. Raffles girls commented they have benefited from these P4C sessions using Asian materials. The students felt that they have looked into human nature and tried to comprehend its complexity as they questioned themselves and struggled to search for the answers. They have learnt to view society and its problems from different perspectives, instead of taking them for granted. The P4C sessions have made them reflect and understand themselves, the problems of human nature and the world, and how man have been trying to find ways to improve themselves and their lives.

References

Cam, P. (1993) Thinking stories 1: Teacher resource and activity book, Sydney, Australia: Hale & Iremonger.

Cam, P. (1994) Thinking stories 2: Teacher resource and activity book, Sydney, Australia: Hale & Iremonger.

Khor, V., Lim T. K. & Au, I. (1997) Using Asian stories in Henry Park Primary to promote family values, Paper presented at the Symposium on Philosophy for Children in Singapore, The 7th International Conference on Thinking, Singapore, June.

Lim, C. (1978) Eggs, in C. Lim (ed.) *Little ironies : Stories of Singa*pore, Heinemann Educational Books.

Lim, T. K. (1997) Promoting critical thinking in the Singapore classroom through the Philosophy for Children programme, Paper presented at the Symposium on Philosophy for Children in Singapore, The 7th International Conference on Thinking, Singapore, June.

Lim T. K. & Loo, C. P. (1995) Can primary pupils do philosophy? Paper presented at the Symposium on Cognitive skills: Development and assessment, 9th Annual Conference of the Educational Research Association, Singapore, November.

Lipman, M. (1981) *Pixie*, Upper Montclair, New Jersey: Institute for the Advancement of Philosophy for Children.

Lipman, M. & Sharp, A. M. (1982) Looking for meaning: Instruction manual for Pixie, Upper Montclair, New Jersey: Institute for the Advancement of Philosophy for Children

Mirikitani, J. (1993) Breaking Traditions in L. Yep (Ed) American Dragons: Twenty-Five Asian American Voices, New York: Harper Collins.

Singapore (1991) White Paper on Shared Values, Singapore: Singapore National Printers.

Tan, A. (1989) The Joy Luck Club, United States: Ivy Books.

Tan, S., Lim T. K. & Lim, C. (1997) Moral Philosophy and Ethics in Raffles Girls School, Paper presented at the Symposium on Philosophy for Children in Singapore, The 7th International Conference on Thinking, Singapore, June.

Tham, C., (1990) Fascist rock: Stories of rebellion, Times Books International.

Tsai C. C. (1991) *The sayings of Confucius*, translated by Mary Ng En Tzu, Singapore: Asiapac Books.

Ycp, L. (1989) The old jar, in L. Yep (ed.) *The rainbow people*, New York: Harper Collins.

Using a Community of Inquiry for Science Learning, or the Story of It'

LISA NOVEMSKY

Second Teaching: A Community of Inquiry for Science Learning

Second teaching (Novemsky, 1994, 1998) is a model of guided small group inquiry that emerged from intense study of students in the process of learning science using a reform model of postsecondary physics learning (Van Heuvelen, 1991). Second teaching as a pedagogy is based on the ideas of L.S. Vygotsky (1986). The inquiry activity follows the introduction of new ideas, or first teaching. In second teaching the collective thinking and dialogue of a collaborative group is created then recreated in a self-correcting process of guided inquiry and conversational apprenticeship generating a wisdom somewhat beyond the level for each individual member. Second teaching can be seen as a small group version of a community of inquiry specialized for learning science and practicing its specialized language.

Specialized Language of Science

Hertzler (1965, p. 351) has suggested that some of the language in daily use is of limited value in dealing with science. In large part, mastery of science requires proficiency in specialized ways of using language (Lemke, 1990, p.21). Induction into a science community, especially for learners with limited language proficiency, means learning science as a second language.

Formal and precise language structures and vocabulary of scientific discourse tend to be distant from and distinct from the natural language of students' peer cultures. There is a significant gap between the formal and precise language of science education and informal vernacular of novice science learners. Language of science description and explanation used by students may present an obstacle to effective

learning, comprehension, expression, and communication of technical ideas.

All thought draws its contents from nouns, verbs, and adjectives; but the mode of the thought or the type of a science, is determined by the grammatical categories which are employed in the manipulation of the words. (Snell, 1960, p. 237)

Complex cognitive and linguistic skills must be mastered by students who find this abstract, objective, precise, logical, quantitative realm rather foreign. Understanding science concepts, for example, involves instantiation of a specialized mode of experiencing, defining, categorizing, describing, and explaining the world.

Scientific language is highly formalized, conventionalized or standardized as to connotations and meanings of word with a high degree of semantic consistency. Specialized scientific language is discriminative and specific as to name, feature and category of referents. Historically, scientific words have had a high degree of permanence, as well as singleness of meaning, and marked constancy in form and function (Hertzler, 1965, p. 353).

Science Learning as Second Language Learning

"Since knowledge is inescapably linguistic" (Sharp, 1991, p. 32) and each academic discipline presents its own language, an individual can be recognized as accomplished in a discipline when and only when that person is seen to be somewhat fluent in accurate reasoning, description, and explanation. At introductory levels, academic languages often present a challenge to novice learners. Thus, language learning in an unfamiliar academic discipline involves processes similar to learning a second or foreign language. Language factors appear to make significant contributions to formation and proliferation of conceptual understanding and ability to reason within conventions of a particular academic discipline.

Lisa Novemsky (novemsky@brooklyn.cuny.edu) is an Assistant Professor of Science Education at Brooklyn College. In her research she has been exploring language and thinking in communities of science inquiry.



"The mastery of a specialized subject like science is in large part mastery of its specialized ways of using language" (Lemke, 1990, p.21).

Although the nature of science and its disciplines has been an area of disagreement among philosophers, scientist, and science educators for many decades (Alters, 1997) an individual can be recognized as accomplished in a scientific discipline when and only when that person is seen to be somewhat fluent in accurate reasoning, description, and explanation in a specific scientific discipline. Science can be characterized, therefore, by specific attributes of language: by precision and accuracy of description and clarity of reasoning and presentation of evidence in explanation.

Induction into a community of scientists, especially for non-traditional learners means learning a second scientific and technical language. An intervening process seems to be important for non-traditional learners to comprehend and thereby gain access to content. At introductory levels, these academic languages often present a challenge to novice learners. Thus, language learning in an unfamiliar academic discipline involves processes similar to learning a second or foreign language. Language factors appear to make significant contributions to formation and facilitation of conceptual understanding and ability to reason within conventions of a particular academic discipline. Limited

language proficiency within such a discipline, therefore, may be seen as making significant and potential contributions to formation and proliferation of misconceptions within that discipline.

Becker (1988) speaks of learning new languages as an attunement, through

...the experience of learning a language in context, by trial and error, by making mistakes and learning....[T] he only way to learn anything is by making mistakes (Becker, 1988, p. 128). Each language is an attunement over time—a unique way of sounding, shaping, remembering, interacting, and referring. (Becker, 1988, p. 138)

Science learning is equivalent to tuning in to a second culture with unique practices and specialized language. In learning a second language, immersion and rehearsal provide an environment for attunement that refines language usage that facilitates ease and natural flow. Similarly in learning science, immersion and participation, learning by practice and approximation rather than passive reading and listening, becomes a logical prescription.

Understanding concepts involves instantiation of a specialized mode of experiencing, defining, categorizing, describing, and explaining the world. Development of a new processing system involves a deep learning that encompasses multi-modal language aspects. Fluency in a specialized language can be gained by active immersion in that specialized culture. Immersion and participation, learning by practice and successive approximations rather than passive reading and listening becomes a logical prescription. In second teaching students are provided with opportunities to do what scientists do, explore scientific ideas, draw diagrams, and solve problems in small groups. In second teaching individuals are apprenticed to the slightly more accomplished collective wisdom and skills of the small group itself. In dialogue spontaneous language and learning take place in the course of natural peer conversation.

A Conversational Apprenticeship in Second Teaching

Lipman's idea of conversational apprenticeship (Lipman, 1991, p. 40) describes a process of how students are gradually initiated into the *skill and partnership* of ongoing dialogue in small groups. Conversational apprenticeship in second teaching appears to be facilitated by the group itself. In its collective wisdom, a small group acts as a mentor to its individual members since the group has the potential to operate just above the level of acquired knowledge of its individual members.

Just as a student of second language must learn to think in that language and not merely translate mechanically from one language to another, so a student learning introductory science must learn to think in that scientific language and not merely translate mechanically into common vernacular. "Learning is a constructive process in which a student converts words and examples generated by a teacher or presented in a text, into usable skills, such as solving problems" (Chi, Bassok, Lewis, Reimann, & Glaser, 1989). Experiments done by Dansereau (1988) suggest that verbal participation facilitates retention. "Change is more likely when one is required to explain, elaborate, or defend one's position to others, as well as to oneself" (Brown & Palincsar, 1989, p. 395). When new and difficult ideas and activities emerge in a group; dissident, and mutually incommensurate ideas tend to be generated. Cognitive conflict and dissonance (Festinger, 1957) that ensues provides the opportunity for group grappling and learning. In an effort to resolve conflict or dissonance, such a situation calls forth the need for convincing explanatory discourse.

In a dialogue...disequilibrium is enforced in order to force forward movement. One cannot help thinking of the analogy with walking where you move forward by constantly throwing yourself off balance....Each step forward makes a further step forward possible; in a dialogue, each argument evokes a counterargument that pushes itself beyond the other and pushes the other beyond itself. (Lipman, 1991, p. 232)

Individuals often discuss differences and argue in the natural language of their peer culture. Gradually, in small approximations, the language structures and vocabulary of a particular discipline begin to emerge as learners use aspects of the rhetoric of logical argument, integrated with their previous language base, to defend their positions. Vygotsky contends that "...external dialogue is transformed into inner speech and inner speech leads to thinking" (Lipman, 1996, p. 14). Describing and explaining observations and findings require a specialized language and symbol system, which are shared by members of a community. This specialized language is not only for communication purposes. According to Vygotsky, language serves also as a means of exploration of subject matter. In fact, it was his idea that language serves as a cultural means for developing scientific reasoning (Vygotsky, 1934/1962).

There is a significant gap between formal and precise

language of postsecondary physics education and informal vernacular of many physics learners. Such a language gap poses a challenge to students who are in a process of developing conceptual understanding of physics ideas along with physics reasoning skills. To many students standard English enhanced with technical scientific parlance presents severe difficulties similar to confusion encountered when confronted

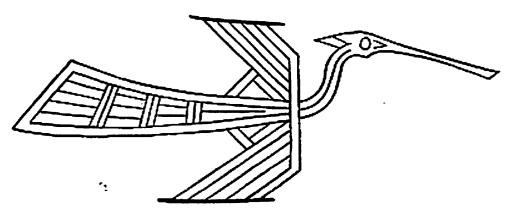
with a totally foreign language (Lemke, 1990; Orr, 1987). If this language gap is not addressed, critical language-related misconceptions are likely to occur. In order to facilitate physics learning for *all* students an intervening process may be appropriate.

Physicists and other technical people tend to use full noun phrases or shortened versions repeatedly rather than pronouns to avoid imprecision and possible ambiguity (Huckin & Olsen, 1991, pp. 480-481). Beginning students in this study, in contrast, tend to speckle their discourse with indeterminate pronouns to cover insecure knowledge or terminology. Orr (1987) reports observations of students with limited language proficiency mistaking qualifiers for that which is qualified and vice versa, nonstandard uses of prepositions and conjunctions, and systematic errors in comparative grammatical structures. According to Orr's observations these nonstandard language uses are accompanied by nonstandard perceptions of time, distance, and other mathematical and scientific concepts.

A Study of Pronoun Use in Learning Physics

An educational experiment at New Jersey Institute of Technology (Gautreau & Novemsky, 1997) provided strong evidence that a reform model of physics education with *second teaching* appeared to contribute to significantly greater student success in introductory physics learning than conventional instruction (lecture, lab, and recitation), particularly for non-traditional students who would not have been admitted to the university under time-honored guidelines.

The author observed conversations during second teaching. Having noticed a remarkable frequency of indefinite pronouns without antecedents in student conversations about physics ideas, the author began to document such occurrences and then reflect on emerging patterns in the use of such pronouns. In the following excerpt from student conversation three basic physics terms---projectile motion, contact, and weight---were used. Partial understanding of the physics involved was conveyed despite confusion in usage and interrelationship of the words contact and weight. Despite the diminution of communicative clarity, the statement provided grist for group process.



We're doing projectile motion, which is when a ball is thrown into the air, the only contact it has is the weight.

It, in the passage, probably refers back to a ball; however in terms of grammar the referent is not clear. Two other possible referents exist: air and projectile motion. This demonstrated lack of clarity in use of the pronoun it without a precise previous referent fails to convey the precision and clarity that is necessary for model physics discourse.

Communication in a technical discipline such as physics necessitates sharp determinate precision lexical elements. The use of indeterminate pronouns (such as *it*, *that*, *this*, *those*, *them*, and *thing*) is therefore minimized, since their use compromises precision and clarity. From the pilot studies on, observations indicated that pronouns appeared to be over-used by students who did not have easy access to precise and appropriate technical terminology. Typical uses of pronouns as temporary footholds are shown in the following examples where previous referents for indeterminate pronouns were absent or ambiguous:

The picture shows a decline then no movement so it decreases and becomes constant.

When it is horizontal there is a weight and normal force, these two are equals.

I think this is gonna be harder, faster and it's gonna try to exert a greater force on the pin than the pin.

The most pervasive pronoun used was *it*. Two or more *it*s were frequently found in a single sentence, often with the various *it*s referring to absent or ambiguous referents. During initial stages of *second teaching*, indeterminate pronouns pervaded student discourse. Examples from student discourse of pervasive use of *it* and resulting dearth of clarity in physics communication follow:

It's gonna go at the same thing. If the velocity decreases it goes the opposite way. So it depends on which way it's going.

It's not goin anywhere. I mean, it has a force on itself because it has its own weight and it's gonna try to stop whatever gets in the way. I guess. I don't know.

A Study of Pronoun Frequency

A pre- and post-test study was carried out with "non-traditional" pre-college students enrolled in a summer program to prepare them for their first semester in an engineering and technical college experience in New Jersey. For the purpose of this paper they are identified as "non-traditional" by qualifying for this educational opportunity program. They were participating in an intensive physics course

based on Alan Van Heuvelen's Overview Case Study model. Pre- and post-tests were administered in which conceptual mechanics questions were asked. For each question students were asked to explain their answer. The pre- and post-tests were identical.

The frequency of the word *it* in all forms was calculated. The findings indicated a significant difference in the pre- and post-test conditions. Students were also observed in their small group problem solving groups by the author. The examples of conversations involving indeterminate pronouns in this paper are derived from these observations.

A statistical analysis of the frequency of *it* in 440 written explanations showed that every student used the word *it* at least twice in the course of ten explanations. Average total frequency of *its* (*it*, *its*, *it's*, and *itself*) per student was more than 8 *its* over 10 questions, amounting to almost one *it* per question for each student. Average pre-test frequency of *its* per person over five questions was 5.04. Average post-test frequency of *its* per person over five questions was reduced to 2.98. Average frequency of *its* per person decreased considerably. In the measure of *its* no significant gender difference was found.

These results suggest that pronoun usage may play a facilitative role in transitions from common vernacular to formal physics discourse. Lack of clarity in communication of physics ideas seemed to be related to quantitative measures of *it* usage. A reduction in use of *it* was found as physics knowledge and technical language were learned.

During periods of *second teaching*, the investigator observed many sessions of *second teaching* dialogue, as tentative or incomplete understanding moved toward more complete states of comprehension. Successive refinements of physics knowledge as well as discourse moved physics learning gradually forward in stepwise fashion as small groups continued to engage in physics dialogue continually assimilating new physics terms.

Two common patterns were observed. Improper use of new terms was avoided by holding their places with indeterminate pronouns. Pronouns tend to be used by group members as temporary footholds allowing discourse while delaying the inevitable use of precise terminology. Such pronoun usage was illustrated as two students engaged in discussing an arrow in a physics diagram.

Student A: That's goin up. Student B: The tension? Student A: No, the direction.

Student A used the indeterminate pronoun *that* to initiate discussion perhaps before thoughts were fully formed. Student B, in seeking clarification, gave assistance by hesitatingly trying to fill in the referent for a vague pronoun. The same short conversation can be used to illustrate a second lexical pattern noticed during observations of students engaged in physics discourse.

In the process of second teaching, in hesitant street lan-

guage, students often struggled to translate new physics knowledge from precise language of a physics professor to phrases that sounded more familiar to their ears. Translating into common vernacular allowed for initial understanding, for familiarity. Gradually common vernacular was transformed into more formal physics discourse. Note the progression in the following series of one student's statements.

It's reducing. It's actually decelerating when it starts goin' down.

It's acceleration in the positive direction.

Physics-like terminology was occasionally invented to bridge the gap between the vernacular and formal parlance. Several groups shared a creative phrase when they were discussing a truck traveling in the direction of *intended motion*. This creatively invented phrase personalizes the experience of the truck. The descriptive value of *intended motion*, in distinguishing the truck's direction of motion from the box slipping on the truck bed proved so useful to students that the invented term migrated around the room from one group to other groups. None of the students questioned the term. It seemed to make good sense. It had the immediate effect of clarifying discussion of the problem.

In conclusion, it appears as if indeterminate pronouns without grammatically proper antecedents serve a useful role in initiating conversation or written text in communities of inquiry, particularly when precise vocabulary has not yet been established. Indeterminate pronouns can serve as developmental placeholders that can then be defined and redefined through community reflection and self-correction.

References

Alters, B. J. (1997). Whose nature of science? *Journal of Research in Science Teaching* 34₂ (39-55).

Becker, A. L. (1988). Attunement: An essay on philology and logophilia. In J.H. Hill, D. Tedlock, & A. L. Becker, P. V. Kroskrity (Eds.), On the ethnography of communication: The legacy of Sapir (Essays in honor of Harry Hoijer 1984 (pp. 109-147). Los Angeles, CA: UCLA Department of Anthropology

Brown, A. L., & Palincsar, A. S. (1989). Guided, cooperative learning and individual knowledge acquisition. In L. B. Resnick (Ed.), *Knowing, learning, and instruction* (pp. 393-452). Hillsdale, NJ: Lawrence Erlbaum Associates.

Chi, M. T. H, Bassok, M., Lewis, M. W., Reimann, P., & Glaser, R. (1989). Self-explanations: How students study and use examples in learning to solve problems. <u>Cognitive Science</u>, 13, 145-182.

Dansereau, D. F., (1988). Cooperative learning strategies. In Weinstein, C.E., Goetz, E.T., and Alexander, P.A., (Eds.) *Learning and study strategies*. New York: Academic Press.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Gautreau, R., & Novemsky, L. (1997). Concepts first—A small group approach to physics learning. *American Journal of Physics 65* (5), 418–428.

Hertzler, J.O. (1965). A sociology of language, New York:

Random House.

Huckin, T. N., and Olsen, L. A., (1991). *Technical Writing and Professional Communication for Nonnative Speakers of English.* (2nd. ed.) New York: McGraw Hill.

Lemke, J. L. (1990). Talking science: Language, learning, and values. Norwood, NJ: Ablex.

Lipman, M., (1996). *The Role of Distributed Thinking in Preparing Teachers to Teach for Reasoning*. Delivered as an invited paper at the annual conference of the American Educational Research Association, New York, New York

Novemsky, L. (1994, October) The second teaching: Exploring a new pedagogy, presentation at the Northeastern Section Meeting of the *American Association of Physics Teachers* Ogoontz, Pennsylvania

Novemsky, L. (1998) Second teaching: An exploration of cognitive factors in small group physics learning. Doctoral dissertation, Rutgers University, New Brunswick, New Jersey.

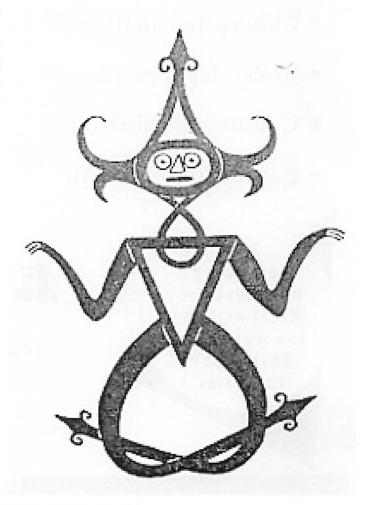
Orr, E. W. (1987). Twice as less: Black English and the performance of black students in math and science? New York: Norton

Sharp, A. M. (1991) The community of inquiry: education for democracy. *Thinking, The Journal of Philosophy for Children* 9(2), 31-37.

Snell, B. (1960). Discovery of the mind: The Greek origins of European thought. New York: Harper.

Van Heuvelen, A. (1991). Overview, case study physics. *American Journal of Physics* 59, 898–907.

Vygotsky, L. S. (1986). *Thought and language*. (E. Hanfmann & G. Vakar, Eds. & Trans.). Cambridge, MA: MIT Press. (Original work published in 1934)



Philosophy for Children



PreK-12 Children's Novels & Teacher Manuals

GREAT FOR:

- ◆ Dialogical inquiry
- ♦ Conceptual analysis
- ◆ Reflective reasoning
- ◆ Contextual thinking
- ♦ Reasoned judgments

THROUGH THEMES LIKE:

- **♦** Ethics
- ◆ Language
- ◆ Democracy
- ◆ Nature
- **♦**Logic
- ◆ Personhood
- ♦ Art

2001
APA Award
Recipient for
Excellence &
Innovation in
Philosophy
Programs





14 Normal Avenue • Upper Montclair, NJ 07043
Phone: 973-655-4277 • Fax: 973-655-7834
matkowskij@mail.montclair.edu
http://www.montclair.edu/iapc

Teacher Education Services Available

EDUCATIONAL THEORY

Sponsored by the John Dewey Society, the Philosophy of Education Society, the College of Education, University of Illinois at Urbana-Champaign, and the College of Education, University of Illinois at Chicago, EDUCATIONAL THEORY is a scholarly journal devoted to fostering the continued development of educational theory and to encouraging the disciplined discussion of problems that arise within the educational profession.



IN RECENT ISSUES

FALL 2002

JOHN HALLIDAY AND PAUL HAGER Context, Judgment, and Learning

ROB REICH
Opting Out of Education:
Yoder, Mozert, and the Autonomy of Children

WINTER 2003 NIGEL TURBS The Concept of "Teachability"

DAVID BLACKER

More Than Test Scores:
A Liberal Contextualist Picture of Educational Accountability

SPRING 2003
CHRIS HIGGINS
Teaching and the Good Life:
A Critique of the Ascetic Ideal in Education

MATTHEW MORGAN
The Role of Prudence in Education

SUBSCRIPTION RATES

Individual Subscription Institutional Subscription \$50.00 \$100.00

For more information: EDUCATIONAL THEORY, University of Illinois, 1310 S. Sixth Street, Champaign, IL 61820. website: http://www.ed.uiuc.edu/educational-theory



