LEARNING TO OPERATE WITH PHILOSOPHICAL CONCEPTS

INTRODUCTION

"Philosophy for Children" has preponderantly started from the assumption that there is no fundamental difference between the thinking of adults and the thinking of children: both make use of·the same mental operations.[1] Moreover, children seem to be interested in the same basic questions about life and its meaning as adults. So children and adults apparently perform the same activities when they join in philosophical discussions. It is also easily assumed that children are particularly apt to philosophical thinking, because they are inquisitive, unconventional and – contrary to traditional educational opinion – rational, often even more so than adults.

At the same time, the ability of children to philosophize has been questioned from a psychological perspective. Frequently, doubt has been cast on children's skills in handling "abstract" concepts. Arguments for such a view have been found in the developmental psychology of Piaget, according to which the ability to handle concepts of a certain level of abstraction is restricted to a developmental level bound to a minimum age.

Advocates of philosophy for children have pointed to the meager empirical evidence for Piaget's stage theory and to the rigidity with which it has been applied by educators. This being granted, one should nevertheless not rashly conclude that children can handle any conceivable conceptual difficulty. There are possibilities to develop conceptual thinking at a much earlier age than is assumed by Piaget – especially Soviet psychology has paid attention to those possibilities – but only if the necessary preconditions are taken into account.

Although we do not want to question the possibility of philosophizing with children, in this article we point to a few difficulties, which – if overlooked – will seriously limit its extent. Even if children perform the same basic mental operations as adults (probably there is only a limited number of such operations), this is not enough evidence to equate children's thinking with adult thinking. Those difficulties concern the function of **questioning**, the relation between (everyday) language and philosophical questions, and the nature of philosophical **concepts**. These problems are not unrelated: the type of questions one asks is dependent on the concepts one uses. We will concentrate on those aspects of philosophical concept building which concern all philosophical education, and, therefore, also philosophizing with children.

PHILOSOPHICAL QUESTIONING AND PHILOSOPHICAL REASONING

Philosophical self-reflection in general and the theory of philosophy for children often depart from the assumption that philosophical questions are just there, and that everybody – especially the child – has a natural tendency to philosophize. Philosophical education would be nothing more than the organization of this activity.

Wondering at the world and asking penetrating questions certainly characterize children's thought, though one can easily exaggerate the unconventionality of the child's way of thinking. Asking questions may have a specific function. At a certain age children tend to ask questions of a specific kind ('what'-, 'why'- questions). Two functions of asking questions that have nothing to do with philosophy should not be overlooked:

1. Keeping the conversation going. Children often ask for the obvious. They just like talking. Children talk all day. You realize that when you have to keep up with them.
2. Children frequently ask a specific question out of a particular concern or interest. Their interest often goes no further than that particular occasion. Questions like these are easily misunderstood by adults, because they are not informed about the specific event which gave rise to the question, and because the child assumes adults know everything.

I am cutting bread. Caroline[2] (3 years old) stands next to me, her nose almost on the knife. "What are you doing, Daddy?" she asks for the fifth time. "I am playing football on the roof," is my conventional answer if I am tired of questioning. She, amused and indignant at the same time: "No! You are cutting bread!"

The same child, 3 years older and as inquisitive as ever, suddenly announces during dinner: "The world is round. But standing on it, you do not see this." Theoretical interest in cosmology? We cannot rule it out. But she may also be just echoing what she has heard in school. As a parent you don't always know, because the child is invariably not in the mood of carrying on the conversation.

Thinking in general is closely tied to **language**, and this is especially true of philosophical problems: semantic questions merging into ontological problems are at the heart of philosophical thinking. Interest in language, therefore, can be the

beginning of philosophy, if a separation between purely linguistic problems (questions relating to the peculiarities of one language) and semantic/ontological problems is made.

Interest in language is universal in children. At an age of about 4 they already delight in questioning about language and meaning and this fascination can have a long life. One can have a lot of fun with little children by giving fancy names to objects in the environment.

The origin of language particularly draws the child's attention at various ages. Caroline (6 years old) sits reflecting for some time during dinner, while the conversation goes on. Suddenly she interrupts and declares: "In former times those men first built a house, and then they carried everything which they needed into it, and then they gave names to those things." The ensuing discussion circled around the question of whether "those men" had left anything out of language. Caroline and her sister (2 years older) agreed that everything in the world now had a name. This idea of the completeness of language seems evident to more children. I heard a remark of the same intention by a sixth-grader in the classroom during a discussion about the question how you learn language. Regrettably, the teacher did not hear the remark.

The IAPC program, therefore, rightly starts with questions about meaning. The emerging philosophical problems in questions about meaning and language disappear, however, easily from view. The origin of language and the way you learn it, plays on words and peculiarities of language are fascinating in themselves and threaten to supplant the philosophical problem. A boundary must be drawn between philosophical questions concerning meaning and purely linguistic problems. Even much older children or adults without philosophical training are often with difficulty kept on the track of the philosophical problem.

Children's thought is often characterized by a high degree of generality; they seem to look for very general theories about the world and its origin. This tendency strikes us as philosophical in little children and it can certainly be used as a starting point of philosophical discussions. At the same time, we should not forget that the cause of the generality of the child's thought may be quite distinct from the motive of philosophical reasoning in the adult. The child may simply miss the necessary knowledge to reason in terms of particulars, whereas adult philosophical reasoning – if it is of any value at all – has already incorporated large amounts of factual knowledge about reality in its questions. Reasoning is not independent of knowledge and in this respect the child is at a disadvantage. At the same time this lack of knowledge and of routine procedures gives the

child's reasoning its high degree of flexibility and originality, which is a precondition for philosophy.

QUESTIONS AND CONCEPTS

In idealizing the philosophical activity of children, one may overestimate their real abilities. Philosophizing with children then can easily degenerate into a collective wondering at banalities, or into a mutual misunderstanding. Philosophical questions are not eternal questions, waiting to be picked up by the wondering mind. When a question is asked, certain expectations concerning the answer are created. These expectations are not always the same for all participants of the discussion, especially not when some of them are children and others are adults. As we mentioned before, the child's concepts are closely tied to an event structure, which can prevent it from understanding the general intention of certain questions.

A precondition for asking a question is the use of adequate concepts which constitute the framework ('problem space') for the expected answer. Concepts vary with these expectations. Moreover, discussing a philosophical question will often force the participants to broaden, narrow, shift; in short, to change their concepts, thereby transforming the original question.

This process of transformation is rarely fully appreciated by teachers. Amusing misunderstandings may result: the children see no problem at all, because the meaning of the question depends on the use of certain categories which do not come naturally to their minds and the teacher misinterprets their incomprehension as obstinacy.

Philosophical concepts distinguish themselves from those of daily life by their generality, by their abstract character, but especially by their complexity: most philosophical concepts are no simple class concepts which can be dealt with by prototype learning. Learning to philosophize may therefore add a new dimension to the conceptual learning of children, but only if the inherent difficulties are not ignored. We will successively explain these difficulties and bring examples from transcripts of sessions of philosophy for children. The same difficulties, however, should not be overlooked in introducing adults to philosophy.

PHILOSOPHICAL CONCEPTS: GENERALITY

Categorical concepts in philosophy are highly general. Not only are they general, but categories in philosophy carry specific overtones which they do not or not always have in daily language. The philosophical question is, as it were, embedded in the concept and without this concept the question cannot be

asked. This is especially true of compatibility questions as they are frequent in ethics: questions of the type "Is this type of behavior compatible with that type?" or "Is this behavior compatible with that acknowledged rule?"

Questions about compatibility presuppose a general covering category which functions as the problem space for the question: without the categorical concept there is no question, or a different question. Therefore in philosophical education concept formation should go together with problem development or problem transformation. We give one example of the partly disastrous, partly amusing consequences of neglecting this elementary rule of philosophical education.[3]

Lisa, chapter 1, starts its ethical quest from the problem of eating the meat of animals. More precisely the problem is: How can you both love animals and eat them. This problem is certainly suited to raise ethical problems with children. At the same time, one should not assume that the problem is somehow 'given' for children. My children – who are as fond of animals as all children are – often go through the whole process of raising, killing and processing chickens while they are eating chicken at dinner. Sometimes their descriptions are so lively and detailed, that I do not like my chicken anymore, but they eat with taste. There is no ethical problem for the children, and one of the reasons may be the lack of the particular concept of animal which the ethical question presupposes.

A transcript of a classroom discussion with Miriam Minkowitz[4] illustrates this point. The teacher begins by asking which of the children love animals. Of course all do. Next the question of eating meat is introduced:

Miriam:	You say you love animals. Do you eat meat?
Carole:	Sure.
Miriam:	You don't think there is a contradiction between loving animals and eating meat?
Carole:	Nope.

This amazes the teacher. She continues the conversation by asking which kinds of animals are eaten and which are not. Emphasis shifts to the (teacher's) viewpoint, that there must be a contradiction between eating some animals, and abhorring the idea of eating other animals, especially pets. It becomes clear, first that the children do not understand what a contradiction is, and secondly that 'pets' for them come into a very special category, whereas the covering category of animals in general has barely any significance for them:

Miriam:	Lisa says in the book – "If I loved animals I would not eat them." Do you think that's a true statement?
Lynn:	I love pork chops!
Betty:	That's right! I eat animals because I love them! Yum yum! Pork chops!
Carole:	That's dumb. That's not what Lisa means in the story. Look – she means she loves live animals. Pets.
Miriam:	Carole do you love animals?
Carole:	Yes.
Miriam:	Yet you eat them?
Carole:	Yes.
Miriam:	Is there a contradiction?
Carole:	I don't know.
Kimberly:	There's no contradiction. You love certain animals, and those you don't eat, like your pets. Other animals you do eat.
Miriam:	Do any of you eat dogs?
(Chorus):	No!
Miriam:	Why not?
Robert:	That's a nasty thought.
Kimberly:	People don't eat dogs. They're pets.
Miriam:	You eat some animals but you don't eat pets?
Carlton:	Some people eat dogs.
(Chorus):	Ugh!
Miriam:	Carlton is pointing out that some people eat dogs.
Kimberly:	But we don't. Maybe Chinese people do because maybe they don't keep dogs for pets.
Miriam:	So you eat animals but you would not eat pets. Which animals would you eat?
Kimberly:	Animals you are supposed to eat! Lambs and cows and chickens.
Carole:	Animals that we raise special for eating, maybe.

The teacher then changes the subject. The question of the contradiction is not taken up again. From the discussion it is clear that 'pets' go into a different category as 'animals' for the children. Therefore the ethical question cannot be asked, at least it cannot be framed as a compatibility problem. This is particularly true, because for children under a certain age categories tend to be exclusive: one thing can belong to only one category a time. I have had long discussions with my children about vegetables being plants: in their opinion something is either a vegetable or a plant. It cannot be both. Even fish were not so long ago not considered to be animals by Caroline because fish "are in the water."

Now one could give a friendly interpretation of the quoted discussion by maintaining the teacher lets the children have their own solution. But this is pointless. They have the solution already. As the discussion goes, the children learn nothing, not even reasoning, of which they are perfectly capable as it is. And the constant repetition of the contradiction-problem by the teacher leads to the assumption that she had quite different intentions.

PHILOSOPHICAL CONCEPTS: ABSTRACTNESS

Abstractness is the distance between conceptual meaning and intuitive notions. The terms 'abstract' and 'general' are often used interchangeably; their meaning, however, is quite distinct. Generality is a characteristic of the concept as such and refers to a hierarchical ordering of categories. Abstractness refers to the (lack of) intuitive content a concept has for a certain person; one and the same concept can be handled in an intuitive (iconic) way by one person and in a more abstract (symbolic) way by another person. The more general a concept, the more abstract, i.e. devoid of intuitive content a concept tends to be. The reverse, however, is not automatically true.

Concept formation begins at an intuitive level in childhood. At a later age, the stage of intuitive understanding of concepts can quickly be passed through, especially if the learner is used to symbolic thinking. In education, the process of abstract concept formation has to be explicitly accompanied. If the learning process immediately jumps to an abstract-symbolic level of understanding, concept formation may never start: everybody needs a certain amount of intuitive content. If, on the other hand, concept formation stays at the intuitive level, the conceptual grasp of reality remains incomplete.

Of this process of abstraction we will give a fairly extended example – this time a highly successful one – taken from a classroom discussion with Gerry Dawson.[5] This discussion starts from the conceptual pair 'difference of degree' and 'difference of kind' introduced in a passage from *Harry*,[6] but aims at a very different concept and understanding.

The teacher starts by ascertaining that the children know the terms and use them correctly in simple examples. Various examples are analysed and it is found that properties between which there is a difference of degree must have something in common, they must be of the same category or must have a mediating attribute. The teacher then explains that, in the case of a difference of degree, one thing or attribute can gradually change into another. If we acknowledge a difference of degree between two persons, we always mean their length, their weight,

i.e. some property which they share and in which they could become equal. In fact – depending on one's point of view – one can consider all predicable differences between people as differences of degree, because people can come to resemble each other. This raises a principal question:

Gerry:	Still with all of those differences between . . . between our heights and the difference between our ages and the difference between our weights, the difference between all of those are all differences of degree?
Child:	Degree.
Gerry:	Does that make the thing that's Jeanne and the thing that's me – is that difference . . . if all of the things about us is a difference of degree does that make us . . . the difference between us, a difference of degree?

At first the children answer this question in the affirmative. The teacher then introduces the difference between living and dead. There is some discussion about this: problems like resurrection are brought up by the children. This discussion is continued by examples from evolution, in particular the difference between apes and men. The criterion of the one becoming the other haunts the children's minds: this concrete content of the concept is at the same time highly helpful and misleading; they won't let it go. The teacher then reverts to the question of the difference between people:

Gerry:	. . . Would you say that all of you are different?
Renata:	No.
Children:	No. The same.
Gerry:	You're all the same?
Renata:	We're difference of degree . . . 'cause we're all people.
Gerry:	Uhhuh. Well, then, if we're all people . . . and . . . and you think that we're all the same, I guess you mean . . . just in the fact that we're all people. But as individuals, are we different?
Children:	Uhhh. Yes.

Asked why, and what makes you you, the children repeat or reconstruct a whole battery of philosophical and mythological theories about individuality and personality; it's your mind, it's your name, etcetera. Pressed by the teacher to decide if one is still the same person, if one cannot use one's own mind, the children are unsure:

Daniel:	No, because . . . You couldn't distinguish yourself from anybody else. You'd just . . . you'd just sit there, you'd be just like the other guy.
Pamela:	I don't know, I don't know, I don't know . . . `

The same problem arises when we ask the question, if we are still the same as one day ago, one year ago, ten years ago:

Renata:	I'm still Renata. I'm stay me my whole life.
Gerry:	Are you the same Renata that you were ten years ago?
Renata:	Uhmhum. Yup . . . except for, as far as my mind goes 'n everything, but I'm still Renata.
Gerry:	Uh . . . well . . . yes, you're still Renata, but if your mind is . . . has changed, 'n everything like that, that you said . . . are you the same person?
Renata:	Yeah. I'm still Renata. I'm still the same as she.
Gerry:	You're still the same . . . you're still the same name . . .
Renata:	But it's still me!

Here we reach a philosophical insight which the teacher was probably aiming at from the start: the concept of a person as an entity to which no empirical properties can be ascribed. This is a very abstract concept and the intuitive content which one could give to it is highly misleading. Nevertheless, this step from concrete and intuitive to abstract is very difficult to make for the children. It took a long way, of which we gave only a few glimpses. It is not clear, and even improbable, that all the children reach this same insight; even the girl from the above passage is cast into doubt again after a few more questions.

The question is justified, if the philosophical insight reached during this session – the concept of a person – was aimed at from the start. This seems too beautiful to be true, especially as the reactions of the children are unpredictable. The early introduction of the difference between persons by the teacher, however, makes it plausible that she had this outcome in mind from the start. Clearly, the success was not exclusively dependent on the spontaneous reasoning and questioning of the children. On the contrary, if one reads the whole transcript, it strikes one as carefully planned: the teacher has an aim in view and tries to reach it step by step. At the same time, she encourages children to express their own thoughts, and in that respect the discussion has a spontaneous character.

Much experience, careful attention for what the children are trying to say and a great deal of philosophical insight in the problem under discussion are needed to attain progress. Even then this success is not guaranteed: the children may not be in the mood, or the particular problem may not interest them. The construction of the IAPC-programs – with much repetition and many exercises – is therefore a wise one. The chance, that a certain concept or insight is picked up sometime is maximized. However, in the programs one misses an explicit relation between the philosophical concepts and the problems which are formulated by means of them. This omission makes high demands on the philosophical experience of the teacher.

PHILOSOPHICAL CONCEPTS: COMPLEXITY

The concepts we took as examples so far are more or less categorical in character. Learning to operate with such a concept can proceed by forming a prototype, even if the difficulty of doing so increases with the generality and the abstractness of the concept. Many concepts in science and in philosophy, however, are not general categories of which a number of logically equivalent specimens exist. The concept of a person was a borderline case already. Many concepts connect facts or concepts of different degrees of generality and abstractness to complex wholes. "Complex" concepts (some authors use the expression "principles") cannot be learned by building a prototype or by being confronted with specimens. They cannot be understood apart from the theoretical structures in which they participate and which give them their specific meanings. In the concept, a whole network of relations is established at one stroke. Even more than in the case of the earlier conceptual difficulties, concept formation is dependent on the acquisition of domain specific knowledge. This point is well recognized by Ann Gazzard in an article[7] in which she surveys the evidence against the Piagetian stage theory. Citing S. Carey, she summarizes:

> *. . . perhaps the best explanation of cognitive development is to be explicated in terms of the acquisition of metaconceptual skills and/or domain specific knowledge. At one point the evidence even tempts her to suggest that "the acquisition and reorganization of strictly domain specific knowledge probably accounts for most of the cognitive differences between 3 year olds and adults."*

And she concludes:

> *. . . insofar as children are no longer limited in terms of their cognitive capacities by maturation, there is no*

reason to suspect that given the appropriate information they might not manifest and be proficient in abstract thinking at younger ages.

Of course, this conclusion makes it necessary for the teacher to explore the nature of the "domain specific knowledge." In the case of philosophy, this domain specific knowledge is largely identical with the concept- and problem-structure of philosophy. That is to say philosophical questioning and concept formation are interdependent. It is disappointing to see that in a classroom session with fourth grade children[8] about the concept of "relationship," the same teacher does not keep this point in view.

The transcript of the session we mean is preceded by a short introduction, in which the teacher reproduces a list of what appeared on the blackboard during the session:

(1) families – blood, people, love
(2) looking alike
(3) vertebrates, invertebrates – different families of animals
(4) love
(5) marriage
(6) "not permanent" relationships
(7) citizenship
(8) friendship
(9) mother-nature

This list should make the reader a little suspicious already: if such divergent ideas are touched upon in a rather short transcript in connection with a difficult, complex concept, chances are great that the relation between all these ideas has remained only nominal. This suspicion is confirmed by reading the transcript. The children hop from one idea to the other and throw everything they meet in a big Pandora's box called "relation(ships)." After examples of family and marriage relationships – which are already complicated by the introduction of "non-permanent" relationships, and after a short explanation in which she says that "John loves Mary" expresses the same relationship as "Mary is loved by John," the teacher switches to a completely different type of relation:

Gazzard: So not only have we got relationships with people, but in this case we've got the relationship between a pot and a cup. A relationship between them is: *the pot covers the cup.*

This introduces a hilarious avalanche of associations to whatever topic the teacher is mentioning. We will cite one section; after some discussion of pots and cups the teacher introduces another instance:

Gazzard: Let's try another one. Okay. We've got "The lion is chasing the giraffe." Now remember we had John and Mary – "John loves Mary," "John is in love with Mary," and "Mary is loved by John." In this one, we've got "The lion is chasing the giraffe." Now what's the relationship here?

Child: Sometimes they both live in the forest. Sometimes they're in the zoo.

Gazzard: Okay. So they're related in that they are both animals, and they might be related in that they live in the zoo. Is there any other relationship here?

Child: Yes . . . umm . . . There's a lion and if there's no other animals around but the giraffe then they could probably chase the giraffe for food. And that would be a relationship.

Gazzard: And what's that sort of relationship?

Child: It's mother nature.

Gazzard: Anyone got another name for that?

Child: I think they are both the same because they both have four legs.

Gazzard: Okay. So they share a relationship in that they both have four legs.

Child: I disagree with X, because a giraffe can run faster than a lion.

Child: I disagree because a giraffe has shorter legs. And a lion has strong legs.

The teacher continues with other examples in which she tries to make the children reformulate the sentence, mostly in the passive voice. Apparently this is a trick to bring to the children's consciousness that a relation is something between two things. As such it fails. The last example is "The two hills are connected by the bridge." One child reformulates this sentence as "The bridge are connected to the two hills." Whatever the child means, the teacher misunderstands "by" for "to"; the resulting confusion keeps the class busy for the rest of the time.

What goes wrong? During most of the session the children try to find a categorical connection between the things related to each other – which is most clear from the discussion about the lion and the giraffe cited above. It is not the relationship between those two animals, on one hand, and that between members of one family on the other hand which are tied together in one concept. It is the things related – the family members, the people living in non-permanent relationships, the lion, the giraffe, Mary and John,

and the bridge and the hills – which they try to unite in one category characterized by a common hallmark. This is not an easy task and will be doomed to failure.

Essential for the concept of "relation(ship)" is that it is a more complex concept than the children imagine. Not even a start toward understanding the concept can be made by simply gathering instances of relationships. The children simply do not understand where to look for the mysterious entity or property. A further hindrance is the fact that two-place and three-place relationships are thrown in the same box without distinction. A beginning of understanding could only have been reached by carefully distinguishing those two categories, and first exercising on simple, not too abstract two-place relations of a comparable degree of generality.

It is disappointing therefore, that the teacher's comment on the session concentrates on the type of interaction dominant during the discussion:

*Until I transcribed the session, I thought that the children had interacted **with each other** very well. It was, therefore, instructive to see how much teacher-student dialogue dominated the session.*

She summarizes: "I was more directive than I believed myself to be." The wording makes clear this is not a desirable property in a teacher. This is another myth haunting philosophy for children. In the foregoing section we have seen a highly successful teacher – Gerry Dawson – be very directive. And a few decades of research on teaching were recently summarized by Medley[9] as "in important respects [different] from the image projected by many teacher educators":

. . . effective teachers' classrooms are orderly places, and [. . .] this order is maintained by the teacher with little visible effort [. . .] Pupil time is tightly structured in effective teachers' classrooms [. . .] Class discussions are also closely controlled by effective teachers [. . .] Pupils ask relatively few questions, and when they answer teacher questions they are less likely to get feedback and the effective teacher is less likely to discuss or amplify their answers [. . .] Where is the individualization, the democracy [. . .] the use of pupil answers that so many preservice teachers are trained to demonstrate?

Footnotes

1. As this article originated in a lecture, we will not refer to all the literature pertaining to the quoted views and opinions. Those who are not familiar with the literature and want to check can write to us. References will also be found in our thesis *Philosophieren lehren,* which will be published in the course of 1988.

2. Several of the anecdotal conversations in this article refer to the children of Karel van der Leeuw. For the sake of liveliness they are told in the "I"-form.

3. All our examples come from the transcripts of classroom discussions which are regularly published in *Thinking; The Journal of Philosophy for Children.* Careful study of these transcripts is an invaluable help for any teacher of philosophy.

4. Miriam Minkowitz: *Discussion of Rights at Police Athletic League.* In: *Thinking* 1:2, 54ff.

5. Gerry Dawson: *Children Discuss Degrees and Kinds of Difference.* In: *Thinking* 1:1, 58ff. This philosophical discussion is quoted as an example of abstract concept formation, but could as well be used as an example of the difficulties of complex concept. The examples in this and the next section are interchangeable to a certain extent, because one conceptual difficulty seldom goes without another.

6. Matthew Lipman: *Harry Stottlemeier's Discovery,* p. 31-32. And: Lipman et al.: *Philosophical Inquiry; An Instructional Manual to Accompany Harry Stottlemeier's Discovery,* p. 173-179.

7. Ann Gazzard: *Philosophy for Children and the Piagetian Framework.* In: *Thinking* 5:1, 10ff.

8. Ann Gazzard: *A Discussion by Fourth Graders of Similar and Different Relationships.* In: *Thinking* 6:3, 40ff.

9. D.M. Medley: *Evolution of Research on Teaching.* In: M.J. Dunkin (Ed.): *The International Encyclopedia of Teaching and Teacher Education,* Oxford etc., Pergamon Press, 1987, p. 105ff.

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