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Wittgenstein, Pretend Play and the Transferred Use of Language

MICHEL TER HARK

Recently the study of how children come to understand the psychological world, known as the “theory of mind,” has come under attack by a number of psychologists inspired by the work of the philosopher Wittgenstein (J. Carpendale & Lewis, 2004; W. Sharrock & Coulter 2004; I. Leudar & A. Costall 2004; D.E. Montgomery 2002). According to these authors, the theory of mind is deeply dependent upon an array of uncritically adopted but contestable assumptions from mainstream philosophy of mind as espoused by people like Chomsky, Fodor, Pylyshyn and Churchland. Some even quote one of the most notorious—and dismissive—passages in Wittgenstein’s *Philosophical Investigations* (1953) where he argues that the “confusion and barrenness” of psychology is to be explained not by its being a “young science” but by the fact that “the existence of experimental method makes us think we have a means of solving the problems which trouble us; though problem and method pass one another by.” (1953, p. 232). By assuming that ordinary psychological concepts refer to mental states that are unobservable and hypothetical in nature, and that are causally related to overt behaviour, the theory of mind makes the conceptual mistake of misconstruing psychological language as consisting of an array of names for referring to inscrutably hidden mental states and processes. Wittgenstein’s rejection of a “private language,” these authors contend, have quite literal application here. In demonstrating the impossibility of “private ostensive definitions” for psychological concepts, Wittgenstein has shown that introspection cannot be the way one learns their meaning. Instead, meaning is based on use, on shared practices with others. To support this claim Wittgenstein is cited as saying that inner processes stand in need of outer criteria (Carpendale & Lewis 2004, p. 84; Sharrock & Coulter 2004, p. 598).

The negative arguments of Wittgenstein do have literal application here, but what about his positive account of psychological concepts? Is Wittgenstein’s positive account really captured by saying that inner processes are in need of outer criteria? And if so, how about the stock response (Fodor & Chihara 1965; Paul Churchland 1984) that Wittgenstein must perforce embrace some form of behaviourism, which would be tantamount to endorsing a regressive, even reactionary,

alternative to the resurgent mentalism of the last half-century? My aim in this article is to show that the recent Wittgensteinian recovery in developmental psychology not only has given a mistaken interpretation of his positive account of psychological concepts but also, and more importantly, failed to take notice of his powerful idea of the transferred use of language, or as I also call it, the analogical extension of the primary use of words to their secondary use. This idea, at least so I argue, is especially relevant for current theoretical discussions about “fictive mental states,” imagination and make-believe. In the First section, I briefly point out what is mistaken about the generally assumed claim that Wittgenstein defends a criterion approach to mental states. The idea of the transferred use of words, which has been left largely unnoticed even in the secondary literature on Wittgenstein, is introduced in section Two via the concept of mental calculation. In the Third section the idea of the transferred use of language is put to work in the context of the debate in developmental psychology concerning the child’s pretend play.

“INNER PROCESSES” AND OUTWARD CRITERIA: SOME MISCONCEPTIONS

A number of psychologists have argued that underlying theories in psycholinguistics as well as developmental psychology is the “ostension paradigm” (Montgomery 2002). According to this paradigm, semantic or conceptual development is primarily a problem of reference. Psychological nouns and verbs acquire meaning by the child’s figuring out and establishing word-referent relations. This view is based on several assumptions. The first is that psychological words function as names referring to objects, events and processes. The second is that the referents of psychological words are private and internal. Thus, according to Wellman (1990, p. 5), by age 3 years young children are dualists who are “knowledgeable of mental states as ontologically different from physical objects and real events.” The problem the child has to overcome, on this view, is to figure out how words refer to its own internal states and processes and what is going on in the private and hidden realms of other people’s minds. As German and Leslie (2000, p. 230) put this problem: “[Given] that beliefs, desires and pretends can be neither seen, heard nor felt, how does the young brain succeed in learning about them?” On the theory of mind (Wellman 1990; Lillard 1993), the problem is solved by a process of theoretical inference. On German’s and Leslie’s recent view (2002), the problem is solved by special mechanisms that, prior to the formation of mentalistic theories, detect mental states. On the other hand, proponents of a simulation theory maintain that children develop an understanding of psychological words through introspection, and by using their imagination to reason about psychological matters (Harris 1991).

Wittgenstein-informed developmental psychologists contest these two assumptions common to both the theory of mind and the simulation theory. The idea

that the meaning of psychological language is acquired by a process of labelling private and internal referents, they argue, is to saddle up the child with a private language. Wittgenstein's private language arguments (1953) would have shown that a private language is incoherent if not impossible.¹ As especially Montgomery (2002) makes clear, private language accounts of the child's command of psychological language are plagued with problems of indeterminacy. For instance, a child noticing via introspection the intention underlying its reaching behaviour is confronted with numerous first-person experiences: self-initiated movement, anticipation, effort, curiosity, etc. An introspective ostensive definition cannot fix the meaning of terms unambiguously. Moreover, the private linguist is not only confronted with the problem of finding a unique referent for a word but also with the problem of comparing it with an exemplar of some sort. The only rule the child can follow is something like "Is this (new sensation) the same as that (exemplar)?" But as Wittgenstein has described in a number of striking aphorisms, it does not make sense to speak of following a rule when one is simultaneously jury and defendant. "The private linguist is imagining the criterion for correctness and imagining whether it has been satisfied; consequently that person cannot distinguish following a rule from seeming to follow it." (Montgomery 2002, p. 363)

In response to this individualistic explanation of the child's understanding of mind, some developmental psychologists now argue that meaning is based on shared practice and public rules, thereby again taking Wittgenstein as their point of departure. This idea is often expressed by quoting Wittgenstein's (1953 §580) dictum that "An 'inner' process stands in need of outward criteria" (Chapman 1987; Montgomery 2002; Carpendale & Lewis 2004). Both their interpretation of this dictum and their account of criteria, however, display some serious flaws. Relying on Chapman (1987), Carpendale & Lewis (2004, p. 88) claim that "children learn about inner processes (their own and other people's) through public criteria, not through their subjective experience; that is, they learn the appropriate contexts for the use of various words referring to the psychological world." There are three problems with this account. One, their definition of criteria is ambivalent. Second, their stricter definition is an erroneous generalization. Third, their account of especially the first person leads to behaviourism. As to the first point, criteria are taken to include the circumstances in which words are used, but at the same time the authors hold a stricter notion by claiming that they are "behavioural evidence for inner experiences such as sensations, emotions, thinking, remembering, imagining and so forth." To be sure, one teaches a child the use of the word, e.g. "to think," under certain circumstances, yet it need not and does not learn those circumstances themselves. A child must learn only under what circumstances the word is to be withheld, e.g. on grounds of pretence or play-acting, but a description of the circumstances in which it is correctly used is not only not required but also impossible. Indeed, is there any less general answer to the question "How do children learn what the relevant circumstances are?" than

“In coming to talk.”? As to the second point, to conclude from the dictum “An ‘inner’ process stands in need of outward criteria” that criteria are behavioural evidence for inner experiences *tout court* is a generalization based on ignoring the scare quotes around “inner process” in the original text.² The reason Wittgenstein put “inner process” between scare-quotes is not just typographical but indicative of a fundamental difference between types of psychological concepts. The context of the remark in the *Philosophical Investigations* is the logic of so-called propositional attitudes like believing and expecting. Unlike pain these are not inner experiences at all. Believing that *p* does not involve having a sensation or feeling of a certain kind. Believing that *p*, unlike feeling pain, cannot be interrupted, does not cease with loss of consciousness or resume on awaking, etc. Criteria therefore are needed not because propositional attitudes refer to inner experiences, as Carpendale and Lewis assume, but because they do not. This also shows that criteria are not so much meant as to provide evidence for the presence or absence of inner states but rather as saying what sort of psychological concept a concept is. As to the third point, Carpendale and Lewis claim that criteria play a role both in the first person and the third person use of psychological language. Or as Chapman put this point: it is through the observation of pain-behavior in ourselves and others that we learn to use the word ‘pain’ correctly.” (Chapman 1987, p. 105). They support their interpretation by quoting Wittgenstein saying (1953 §244): “words are connected with the primitive, the natural, expressions of the sensation and used in their place. A child has hurt himself and he cries; and then adults talk to him and teach him exclamations and, later, sentences. They teach the child new pain-behaviour” (Carpendale & Lewis 2004, p. 88). It is noteworthy that in this very passage Wittgenstein does not speak of “criteria.” Moreover, the final sentences of this passage not quoted by Carpendale and Lewis make clear that “pain” in the first person is as little based on criteria as the child’s crying is based on criteria, and that since “I am in pain” does not describe behaviour but replaces it Wittgenstein is no behaviourist: “So you are saying that the word ‘pain’ really means crying?²—On the contrary: the verbal expression of pain replaces crying and does not describe it.” Chapman’s and Carpendale’s and Lewis’ reading makes Wittgenstein into a logical behaviourist equating the meaning of psychological concepts with concepts referring to behaviour.

Attributing to Wittgenstein behaviourism, in whatever form, misses the point of a very fundamental aspect of his philosophy of language and mind. In §244 the reference to the natural array of instinctive reactions is not meant to attack one referential explanation of the meaning of words only to embrace another. It is two, opposed, referential explanations he attacks—one in terms of inner experiences, the other in terms of overt behaviour. His own explanation is on a different level. Basic to his later philosophy is the idea that a sentence’s having sense depends on other sentences being true. These latter sentences are about a certain sort of human agreement. There must be human agreement of a certain sort for our language to fulfil its roles. With respect to pain-language this agreement

concerns what happens naturally when people are in pain: they moan, cry, tend the part that has been hurt and say “It hurts.” The basic point is that if people did not naturally groan and cry, then it would be impossible to teach children the word pain. This is not a behaviouristic explanation for moaning is not describing, hence not a description either of behaviour or of experience; it is an explanation of the preconditions of sense.

The idea that a sentence’s having sense depends on other sentences being true is also the main point of Wittgenstein’s critique of the “ostension paradigm.” To be sure, as Montgomery points out, Wittgenstein also shows that the mere act of pointing to something and saying that it is called a ϕ leaves open endlessly many interpretations of the way in which “ ϕ ” should be used. An ostensive definition can never, by itself, fix the meaning of a word. On the other hand, when ostensive practices succeed—and Wittgenstein has not the slightest doubt about this—it is against a tacit background of a great many assumptions about language and the world that we tend to pass by unnoticed. For instance, the ostensive definition “This is red” secures immediate uptake only when the child has some knowledge of colours, knows that they are classified into kinds, and knows that the teacher is not only uttering a word but a name which functions to designate a class. Naming cannot fix meaning because it is itself a semantically sophisticated act that presupposes a great deal of conceptual stage-setting and language mastery.

“Am I doing child psychology?—I am making a connexion between the concept of teaching and the concept of meaning.” (Zettel §412). The recent resurgence of Wittgensteinian ideas in psychology seems to miss the point of this remark and to exploit passages on learning in the *Philosophical Investigations* as providing the basis for an alternative (criterion-based) theory concerning the child’s understanding of the mind. Carpendale and Lewis seem to be aware of this point, yet go on to claim that this does not preclude to begin from the foundations that Wittgenstein has cleared. In particular they start from his analysis that “meanings of words only exist in particular contexts” (Carpendale & Lewis 2004, p. 133). Bringing the concept of teaching to bear upon the concept of meaning, however, belongs to the compendium of devices Wittgenstein introduced into philosophy in order to remind us of facts of language and life often taken for granted or overlooked in theorizing. What is taken for granted—also or especially in theories of concept formation—is the role of conceptual stage-setting. The recent discussion in psychology about “fictive mental states” especially show how easy—and how fatal—it is to overlook conceptual stage-setting. In the next sections I argue that this idea is at the bottom of the transferred use of language. “Fictive mental states” do not refer to special sorts of mental states, but are more complex uses of language, i.e. transferred uses of language. Since this criticism especially concerns the theory of mind, it can be seen as providing further support for a Wittgenstein-informed study of the child’s acquisition of psychological concepts.

The notion of the transferred use of language is largely implicit in Wittgenstein's work. It is bound up with a term that does occur in his *Philosophical Investigations*, albeit only twice: "secondary sense."³ According to this view, in concept formation the use of a certain class of psychological concepts is extended to include another domain of phenomena than the one covered by the original class. Instead of the transferred use of language one might also speak of the analogical extension or development of concepts.⁴ The original use of concepts might be called the primary use and the use resulting from the analogical extension the transferred or secondary use of these concepts (instead of "use" one may also speak of "sense," in particular "secondary sense."). For several reasons the terms "primary" and "secondary" can be misleading. "Primary" is not to be taken in an epistemological sense. The term is used in a loose way and refers to the paradigmatic use of a certain class of concepts. "Secondary" is not to be taken in the sense of less important, dispensable or even anomalous language. Yet, Wittgenstein's most explicit example of secondary sense might give this impression. It is concerned with what is described in the psychological literature as "synaesthesia," or the mixing of senses (Cytowic 1989). For instance, hearing-colour synesthetes "see" colours when they hear particular sounds. More commonly, however, the mixing of sense experiences in synaesthesia occurs for different perceptual properties within the same modality, for instance, letters may elicit synaesthetic experiences of colour (Rich & Mattingley 2002; Rich, Bradshaw & Mattingley 2005). Wittgenstein also discusses lexical-colour synaesthesia but his most striking example concerns associating the predicates "fat" and "lean" to describe the days of the week. He says himself to be inclined to call Wednesday fat and Tuesday lean. Wittgenstein, however, is not concerned with explaining how such associations have come about; his interest lies in accounting for how "fat" and "lean" can be used outside their normal categories at all.

Commenting upon his inclination to call Wednesday fat and Tuesday lean he asks whether "fat" and "lean" have some different meaning here from their usual one. The suggestion is that words used in a secondary sense do not differ in meaning from their primary use. In any case, asked what other meaning "fat" as applied to the days of the week has, one cannot tell. Indeed, the one thing one cannot do is to explain the meaning of "fat" by pointing to Wednesday. Hence, the term can be explained only in the usual way.⁵ And one might add, one has not been taught the meaning of the word "fat" in two different ways either. For this reason secondary sense is not the same as non-univocal meaning of words; "bank" does change its meaning when taken in one sense or another. Metaphorical use equally involves transferring words from their home base to another context, but Wittgenstein emphatically denies that secondary use is metaphorical. "If I say 'For me the vowel *e* is yellow' I do not mean: 'yellow' in a metaphorical sense,—for I could not express what I want to say in any other way than by means

of the word 'yellow.'” (1953, p. 216) Metaphors depend on the apprehension of likenesses or analogies of one sort or another. But if someone would say “‘e’ is like yellow’ he would not express the same experience synesthetes would express when saying “‘e’ is yellow.” Moreover, with straightforward metaphors it is always possible to establish the similarities and analogies one wishes to highlight independently of the metaphorical language in question. Here, however, the “analogy” logically cannot be paraphrased and cannot be described without using the familiar word, i.e. “fat,” in its secondary sense. Were one to drop the “analogy” with the primary sense of “fat” nothing would remain of one’s attempt to describe the specific synaesthetic experience. A secondary sense, or a transferred use of language, then, does not stand on its own but is preconditioned by conceptual stage-setting in two ways: its meaning can be explained only by referring to the paradigms used in the primary sense; and one cannot be inclined to use a word in a secondary sense unless one understands it in its primary sense.

“Fat Wednesday” is a non-systematic transferred use of language. Calling Wednesday fat gives one no clue as to what would be meant if another term (from the same domain) would be substituted for “fat,” for instance “weighs more than.” There are also systematic transferred uses. In such cases a whole system of descriptions is transferred to an analogical use. A particularly interesting example is “mental calculating.” Precisely because it is so pervasive and familiar the concept of mental calculating does not stand out as “fat Wednesday” obviously does. Usually enough of the standard surroundings of the primary use of calculating are present to make this transition natural. Thus one normally is dealing with a person who has had regular school training, who is given a problem that falls within her normal competence, and who does not produce an answer at once, but instead falls silent for a moment and comes up with the correct answer. If asked how she got the answer so quickly she may reply for instance that she used the trick of dividing by eight and moving the decimal point instead of multiplying directly by one-hundred. Indeed, the standard surroundings are so obvious that one may easily be misled into supposing that it is just a matter-of-course description of one or another process.⁶ It is precisely in this trap that mentalism has fallen. According to mentalism, the meaning of “mental calculation” is something going on in one’s head. As the philosopher D.M. Armstrong put it “. . . are we not aware of a *current event*: something that goes on in us at the time of the calculation?” (Armstrong 1968, p. 69).

A Wittgenstein-informed position does not differ from mentalism in simply denying that mental calculating is an inner process or activity. The point is that mentalism mistakenly construes this “inner process” on the model of its outward counterpart, i.e. overt calculating, and that it feels justified to do so by superficial grammatical similarities. Thus, in both cases the concept is of something that occurs within a stretch of time and that can be said to consist of stages or steps (Budd 1988). This and other similarities encourage the idea of two areas, the inner and the outer, within which language functions in parallel ways. But

according to Wittgenstein, trying to hold the (superficial) analogy throughout is precisely the mistake. In the first place, there is no clear sense to the idea of an inner analogue of the vehicle of overt calculating, i.e. numbers spoken, written or typed in. Moreover, even if there were such inner surrogates of the vehicle of calculating they could not assume the role of inner processes for I might misinterpret them or simply be unaware of them. In the second place, no such awareness is demanded by the concept of mental calculation. Wittgenstein describes a number of thought experiments showing that calculating processes similar to writing down columns of numbers or typing in numbers on a display are not demanded by the concept of mental calculation. Closer to home, take calculating geniuses (Treffert & Wallace, 2004). The American psychiatrist Benjamin Rush described as early as 1789 the lightning-quick calculating ability of Thomas Fuller, who understood little math more complex than counting. When Fuller was asked how many seconds a man had lived by the time he was 70 years, 17 days and 12 hours old, he gave the correct answer of 2,21,500,800 a minute and a half later.⁷ The important thing to note is that here too we speak of calculating, even though no process has taken place analogous to what we would recognize as such. In the third place, if mental calculation is a concept of a certain kind of inner process, its meaning must be taught indirectly. Since what happens in one person's imagination is not open to another person's observation, the best that can be done is that one person guesses when the right kind of process is going on in another, and by directing the subject's attention to this occurrence hope that he will give himself the correct private ostensive definition (Budd 1988). But as we have seen nothing can be based on private ostensive definitions.

The Wittgensteinian criticism is conceptual: mental calculation is not a concept of the same kind as overt calculating only differing in subject matter. Rather it is a secondary concept that has come about by a linguistic process of analogical development. The unmistakable connection between mental and overt calculation is of a different order than analogies and metaphors established on a process of selecting, emphasizing and suppressing features of a mental process and projecting them upon overt calculating, or conversely. The reason that mental calculation is "analogous" to overt calculation is that the *only* way to describe it is in terms of overt processes. With normal analogies (e.g. "marriage is a zero-sum game") the features of the primary subject (marriage) one wishes to highlight by means of features of the secondary subject (game) are in fact independent of there being such features (games) at all. Describing what the mental process is, however, is something that cannot be done independently of the system of concepts belonging to overt calculating. The analogy therefore is irreducible: *that* one speaks of "multiplying, adding and taking away numbers" is part of the experience of mental calculation. Were one to drop the analogy with overt calculating nothing would remain of the attempt to describe (and to have) the experience of mental calculation. This means that the child's analogical extension of the concept of calculating is not the same as an exercise in figurative language. Facts described

in figurative language can normally also be described in non-figurative language. If the analogical description of mental processes cannot be contrasted with a literal description, then it is essential to the description of mental processes.

Wittgenstein reminds philosophers and psychologists of this irreducibly analogical use of the concept of calculating in this passage: “Only if you have learnt to calculate—on paper or out loud—can you be made to grasp, by means of this concept, what calculating in the head is.” (Wittgenstein 1953, p. 216) This passage may easily but mistakenly be read as an empirical proposition not unlike those to be found in the work of for instance Piaget. However tempting such a reading may seem, the point is not that children in fact have to learn mental calculation with the aid of external devices such as pen-and-paper before learning the ability to calculate in their head. Although many children if asked to work out a sum will automatically reach for pencil and paper, it is conceivable that an initiate learns to compute without ever writing down sums or speaking aloud, but just by observing the pen-and-paper techniques of its teacher. Still, in such a case it would be taught how to go on. A child acquires the concept of calculating through being trained as the rest of us do to certain things. This agreement is part of the conceptual stage-setting of the concept of mental calculation. If the necessity for the agreement is overlooked then so will be the necessity of the child’s having been trained to react to certain things in a certain way for it to mean anything by counting loudly. And so it may seem that a child, without having learned the operation of calculating loudly, might *start* by learning mental calculation. That this is incoherent is evident from Wittgenstein’s question whether it can be imagined that a whole society, say a primitive tribe, might be acquainted only with mental calculation. An essential criterion for speaking of mental calculation would no longer be available: the possibility to check on paper one’s results and in this way to agree with others. It would be senseless to attribute to a member of this tribe the concept of mental calculation not because it would be senseless to attribute mental processes to him, but because nothing would count as a correct result of mental calculation. The command and use of mental computation therefore does not depend on inner mental processes but on the preceding command of the concept of overt calculation.

One of the interesting consequences of Wittgenstein’s reminder is that there is a developmental relation between different sorts of concepts. The command of overt calculation is a logical prerequisite for the formation of the concept of mental calculation, but not vice versa. What the child learns therefore is a new use of the concept of calculation, a transferred use that is. It has learnt the concept of counting, multiplying and adding in specific circumstances, and subsequently it learns to apply them in different circumstances thereby acquiring a new use of language. Moreover, what the child learns when acquiring psychological terms like mental calculating is based on a knowledge acquisition that does not relate to occurrences and happenings in its mind but on public and physical activities of various sorts.⁸ On the mentalist view of concept formation this line of

dependence among concepts is inexplicable. For the mentalist mental calculation is essentially an inner mental process *without* behaviour (it is calculating but not loudly). Actual performances provide merely evidence for the underlying computational processes. The preceding analysis has shown that mental computation is not a mental process without behavioural manifestations but, so to speak, *with* behavioural and physical components. The use and command of this concept depend on the behaviour and circumstances that characterize overt calculating. Therefore the use of mental calculation cannot be investigated by considering that use alone. On the mentalist view, instead, nothing obliges one to take the preceding mastery of language into account.

PRETEND PLAY

Whereas usually enough of the standard surroundings of calculating are present so as not to make one recognize mental calculating as a secondary use, the child's pretend play is often so imaginative that there should be no problem in identifying it as secondary. In this section, I will show that psychologists in the wake of Leslie's seminal paper (Leslie 1987) have nevertheless failed to see pretend play and make-believe as secondary. As a consequence, they have sought to explain pretence in terms of mental representations whereas it needs to be explained as a transferred use of language and related activities. But before going on a brief remark about secondary use of words and secondary activities. If pretend play is secondary it is more appropriate to speak of a secondary activity than of a secondary use of words. Nevertheless talking about a secondary activity will involve the use of words in a secondary sense. To the extent that the child's activities involve the use of words they will also be secondary.

Leslie's seminal paper (Leslie 1987) starts with the assumption that the child's pretence and make-believe are so deviant, even nonsensical, that it poses a serious threat to its cognitive development. Pretend representations are sharply contrasted with "reality-oriented" representations which are taken as paradigmatic of what evolution is all about. About the (by now) standard example, "This banana is a telephone," he says: "Such nonsense violates the basic design principle of primary representation that it represent in a literal fashion." (Leslie 1987, p. 9). Following McCune-Nicolich (1981), he claims that children who pretend have a "double knowledge" about the situation. That is to say, they are pretending that a chair is a train, but at the same time they know that it is a chair really. This double knowledge is interpreted as involving the presence of two simultaneous mental representations; literal or primary representations and pretend representations both referring to the same actual situation. This poses a potential threat for the child, namely that of representational abuse. How can a child who holds a primary representation of a real object, i.e. a chair, at the same time think as if it were a train? How is it that the child's representational system is not totally

undermined by this—is it a chair or is it a train? Both representations cannot be primary as they contradict each other semantically. On the language of thought hypothesis espoused by Leslie mental representations also underlie the use of language, and hence the child's primary use of words should equally be undermined by its use of pretend language.

To account for the child's ability to pretend play and make-believe without contaminating its system of primary representations, Leslie argues that the pretence representations must be "quarantined off" in some way. Pretence representations are produced by copying primary representations into a meta-representational context. This second-order context gives a report or a quotation of the first-order expression. In this way, it makes opaque the expression that was previously transparent. For example, when the child represents the world seriously or in reality-oriented play it may have the representation *The cup is full of water*. But in pretending that the cup is full of water its representation will have the content *I pretend "the cup is full of water"*. The quotation marks indicate that the expression contained in them is decoupled from its primary context, thereby suspending its normal semantics. Meta-representations are freed up from their usual meanings, from their normal input-output relations, so that one object can substitute for a different object without the child confusing actual semantic relations.

It is noteworthy that no actual cases of representational abuse are cited or discussed either in the older or in the recent literature. Consider for instance this observation by a child psychologist now almost forgotten but before the Second World War one of the most prominent European psychologists and precursor of Jean Piaget, Karl Bühler. Typical of illusory games, as he called pretend play, is that the child is completely absorbed by it, yet in the background of his mind the distinction between play and reality is firmly rooted (Bühler, 1918). Or take his contemporary, the philosopher and psychologist Alexius Meinong, who introduced a new category of psychological phenomena, supposals, to deal adequately with a number of psychological facts among them pretend play. But notice his description of pretend play:

"... that the child at play really is in a state of delusion during its play, i.e., that a chair which it has harnessed to the table as a horse to a wagon really is taken by the child to be a horse and that the table really is taken to be a wagon... any person who has had the opportunity to observe children is far more likely to have had occasion to wonder at the sureness with which children even at an early age know how to distinguish between play and reality, than to find them confusing such situations." (Meinong 1910, p. 83)

More recently, Lillard (1994) has given a fairly complete description of forms of abuse. She distinguishes three ways in which the "real-pretend boundary" could be lacking. One is that the barrier does not exist, and children assume that the pretend world and the real world are one. This she considers not likely, the reason being that if children had not a basic awareness of the barrier, their understanding of the real world would be abused by pretence. She concedes

that such reality confusion does appear to occur with fantasies that parents want children to believe are real, like Santa Claus, but that “it does not appear to happen in other cases, when parents are not trying to dupe their children.” (Lillard 1994, p. 216) The second way that the real-pretend boundary might be diffuse is that it might be penetrable, like a “semi-permeable membrane.”⁹ Real-world knowledge indeed seeps into pretend play, Lillard argues, but this speaks only of the fact that it is a subset of children’s behaviour, not that children do not differentiate what is real from what is pretend. Another possibility is that pretend-world elements travel in the reverse direction. For example, children “might expect that if, in the pretend world, a block was a cookie, then in real life that which is called ‘cookie’ should actually be a block. Although it has not been directly studied, the available reports suggest no such confusion.” (Lillard 1994, p. 217)

Despite the absence of evidence for representational abuse psychologists feel nevertheless forced to offer an empirical explanation of why it does (probably) not occur. Talk of a membrane is as metaphorical as talk of a decoupling mechanism, yet the idea is that such metaphors can be unpacked in more straightforward mechanistic concepts thereby emphasizing the empirical nature of the explanation. The absence of evidence for representational abuse, however, could also be a sign of the conceptual nature of the problem. Since the problems dealt with concern at least partly the (semantical) question what is called “pretence” conceptual issues do seem to be involved.¹⁰ If the problem is conceptual its roots are to be found in a mistaken or deficient view of the way concepts function, how they are related to one another and how they are taught. Consider now this remark from Wittgenstein:

“Only children who know about real trains are said to be playing trains. And the word trains in the expression ‘playing trains’ is not used figuratively, nor in a metaphorical sense” (Wittgenstein 1982 §800).

The first sentence says that the command of pretence requires conceptual stage-setting, whereas the second sentence says that to recognize that words may be used in a secondary sense is to see that they are not meaningless in these secondary uses even if one cannot give an account of what they mean in words used in their primary senses as can be done with figurative language. It is indeed a striking fact that almost no references are made to how children are taught concepts in dyadic or triadic interaction.¹¹ The problem of representational abuse therefore may well reflect a failure to see the significance of the fact that the understanding of words used in a primary sense is necessary for a child to be able to pretend-play and make-believe. But one must distinguish between a stronger and a weaker relation here.¹² In the case of fat and lean, as in the case of calculating, the secondary use logically could not exist without the primary use. On the other hand in the case of pretence the relation is weaker. For it is possible that

children of a tribe who know nothing of trains pick up the game of trains from others and play it without realizing that the game is copied from something. But as Wittgenstein remarks about this case: "One might say that the game did not make the same *sense* to them as to us." (Wittgenstein 1953 §282) For instance, the child's game would fail a standard or example to compare with and hence questions as to the quality of its play could not arise. More importantly, because "train" would not be a transferred use of language (from the primary use) its being mentioned by those children would in fact be arbitrary and a completely different word might have been used as well. And because the word—whether "train" or some other—would not have been transferred from the primary use it could be explained, at least among those children, simply by referring to what they actually did when playing their game. This latter point is again in conflict with the dependency relation implied by secondary sense. For another way in which the latter depends on the former is that its meaning is explained by reference to paradigms involved in the primary use, not the secondary use. Put otherwise, in this hypothetical case a child does not mean what a child would who makes-believe that the chair is a train. Hence, here too children cannot be inclined to engage in the activity of playing trains unless they are familiar with the use of "train" in a primary sense. Because the understanding of "train" in the pretend context depends on the understanding of the same word in the non-pretend context, doubt about whether an object is a chair or a train simply cannot arise.

Indeed, the sceptical question, is it a chair or is it a train, can arise only on the assumption that the child has learned the meaning of the word "train" independently of the ability to use it of real trains. The problem of representational abuse therefore is not a problem caused by the epistemic predicament of the child's system of mental representations, but by overlooking the fact that a certain region of language, i.e. pretend language, cannot be understood by considering that use alone but only by taking into account uses of language on which it logically depends. Thus, by overlooking the role of language learning and training it may seem that a child, without having learnt the concept of "pain" might start by learning "My doll is in pain." But this use of language is a secondary use and hence dependent on the one in which one commands the primary use of pain, much as "It seems to me to be red," is dependent on reacting, without more ado, to "What colour is this?" with "Red." Representational abuse then is precluded by a prerequisite of language and communication, i.e. agreement in reactions and responses as established by being trained to use language. No quarantining mechanisms in the mind or brain can have the role agreement has in concept formation. That pretend elements do not seep in across the "barrier," as Lillard herself admits, is not due to the structure of a sort of mental membrane but to the practice of teaching and using pretend language against the background of paradigms involved in the primary use of words. On the other hand, the fact that real-world knowledge does seep in across the "barrier," yet without causing confusion,

does not “merely reflect that knowledge from one domain is applied in another domain.” (Lillard 1994, p. 216) For the question remains why this transfer does not lead to an erosion of the barrier. That no such confusion occurs is a reflection of the fact that the transfer leads to a new, and hence, different use of language, a secondary use that is.

Leslie’s mechanism is not only helpless in maintaining the conditions of sense, it even undermines them. The postulated decoupling mechanism protects the primary representation from contamination by making a copy of the primary representation the normal semantics of which is suspended. But Leslie’s use of the term “copy” here trades on an ambiguity. On the one hand he refers to the analogy with editing a copy of a word-processing file which implies that the copy and the original are identical in content but physically separated. But then the copy, contrary to what Leslie intends, should have the very same semantic properties as the original. On the other hand decoupling is said to effect a mental copy, a representation of a primary representation but without the semantic properties of the latter. Conceived this way it cannot have the same meaning as the primary representation.¹³ Such an account of pretence makes it impossible to explain that the child, if asked what it meant by “pain” when pitying its doll, will not refer to its doll but to the primary use of this concept. Yet it is precisely in virtue of this dependency relation with the primary use that the child is inclined to treat its doll with care and to find the word “pain” appropriate here.¹⁴ Leslie’s explanation of the concept of pretence in terms of mental representations therefore undermines the conditions of sense.

To see more clearly the nature of this criticism it is necessary to have a closer look at other criticisms of Leslie’s position, especially those of Lillard. Proponents of the view that pretend play is meta-representational have drawn a functional link between pretence and theory of mind, hence a capacity for understanding mental representation (Baron-Cohen 1991; Leslie 1987, 1988). On the other hand, Lillard has contested this linkage before the age of five. For a child to possess the concept of pretence in the full sense of that term, she argues, at least two conditions have to be met. The child’s pretence must involve having mental representations, for: “If one knew absolutely nothing about horses, and did not even know that they existed, one could not pretend to be one . . .” (Lillard 1993, p. 373).¹⁵ In addition, the child needs to be aware of, to think about what one is doing, e.g. dealing with a pretend cookie. Without such awareness, Lillard concludes, the child would be merely mistaken, rather than pretending (Lillard 1994, p. 213). In one of her experiments she has shown that young children do not yet command the concept of pretence in the full sense, but instead understand it as external manifestation only. Four- and five-year-olds were shown a troll and were told, for example, “This is Moe, and he’s from the Land of Trolls. Moe’s hopping around, kind of like a rabbit hops. Moe doesn’t know that rabbits hop like that; he doesn’t know anything about rabbits. But he is hopping like a rabbit.” Then children were asked, “Would you say he’s pretending to be a rabbit, or he’s not

pretending to be a rabbit?” Over four trials as well as several variations on this experiment, about 65% of 4- and 5-year-olds have consistently claimed that the character was in fact pretending to be a kangaroo. “In effect,” Lillard points out, “children were asked whether mental representation or action was the more important factor to consider in judging whether a character was engaging in pretence.” (Lillard 1994, p. 223)

To conclude from these experiments that children are not aware that pretence involves mental states and hence are not in command of the concept of pretence is not so much inconclusive as some have supposed as misleading.¹⁶ The experimental outcome seems to be in conflict with naturalistic situations in which children won't be readily inclined to ask other children to join in doll play when they know they have never heard of dolls and do not even know they exist. On the other hand, children in real life might pick up a game from others without realizing that their game was copied from something real. It would be legitimate in such cases to say that the children are playing a game, and also that their game looked like the game the playing of which is based on knowledge of real situations.¹⁷ Finally, when the test question would have been formulated in non-mental yet functionally equivalent terms the outcome might well have been different. For instance, “Moe has never heard of rabbits, yet he hops like a rabbit without having copied this behaviour from real rabbits.” By using mental terms and by limiting the test questions to a simple “Is Moe pretending to be a rabbit or not?” the experiment does not test for this sort of understanding. Indeed, as has also been objected by German and Leslie (2001) the outcome of the experiment may be due to pragmatic factors. In particular children may be unwilling to leave unresolved precisely what the protagonist was supposed to be doing and why. Perhaps children simply chose the only interpretation on offer.

If the outcome of the experiment may be incorrect, what about Lillard's claim that the early grasp of pretence is behaviouristic and that not until mental representations come in the child has acquired the full concept? Her mistake is to think that the knowledge required for concept possession is having a theory of mental representations, the way they are produced, and how they issue in behaviour. As the example of mental calculating also illustrated the command of “fictive mental states” depends on knowledge acquisition that does not involve what we would usually consider to be mental state terms. Doll play, for instance, is a form of make-believe that requires the preceding command of concepts like caring, pity, pain or kissing as they are applied outside the game in their home base. Similarly, when children make believe as if inanimate objects feel pain or are happy, while at the same time denying that these objects can think, this need not mean that their grasp of pretence is in terms of action only (Lillard 1998). The conceptual stage-setting for the child's behaviour in this case is that it supposes that the inanimate objects command a language and it is in virtue of this capacity that it attributes psychological properties to them. Indeed, as Wittgenstein notes, in fairy

tales children have no trouble with the idea that the pot can see and hear things, but in fairy tales pots also speak, walk about, etc. (Wittgenstein 1953 §281). Or consider the (young) child's use of pictures. For instance, a child points to a picture in her illustrated fairy tales and says "That is an angry woman, and that is her eye." This a transferred use of language. Children learn this use of pictures and hence the secondary use of words ("angry" as applied to a picture-face) long before they have the capacity to talk in terms of intentions, not to speak of mental representations. And as every parent knows this priority of the secondary use of words over the talk of intentions and mental representations in no way leads the child into "representational abuse," i.e. confusing the word "eye" as applied to human faces and picture-faces. *A fortiori* it would be nonsense to say that the child cannot really see the figure as an angry woman because for that to be possible it must have the intention to represent the lines and dots on the picture as eyes, noses or whole faces. But to say that the child must be engaged in making a comparison between what it literally sees and what it represents it as being is to have things upside down. Describing pictures by what they represent is not a process of comparing or construing an analogy but a transferred use of language.¹⁸

It might seem as if I am now joining Germane and Leslie (2001) who recently have objected to Lillard that her assumption that concept possession depends upon knowledge is mistaken. If anything, they reply, a representational theory of mind is a consequence of possessing concepts like pretence and believe not a prerequisite. Rather than depending on knowledge, concepts may exist prior to knowledge and may depend on mechanisms. Like the mechanisms of colour vision that allow colours to be attended and thus allow colour concepts to be grounded without prior knowledge of a theory of colours, psychological concepts may be grounded on mechanisms without prior knowledge of a theory of mind. German's and Leslie's position is the old abstractionism in disguise. According to this view, concepts are formed from scratch by abstraction—by discriminative attention (i.e. ostensive definition!) to features given in sense-experience. His choice of colour concepts is unsurprising here for they have always been the abstractionist's favoured examples. But as Geach (1957) has argued, abstractionism fails to account for even so simple a concept as chromatic colour. More importantly, sensory concepts, e.g. colour concepts, do not have the privileged position in concept formation abstractionists typically think they have. They do not have an epistemological primacy over others, for the description of sensations is a highly sophisticated use of concepts, and is secondary to the description of material objects. Indeed, a child may have the concepts of book or chair before it has any colour concepts at all. Similarly, to pretend or to infer pretence on the basis of the other person's behaviour, although not requiring the preceding command of a theory of mind to be applicable, is a highly sophisticated use of concepts, and is secondary to non-pretend uses of psychological and physical object language.

CONCLUSION

The recent resurgence of Wittgenstein-informed psychology provides a welcome antidote to the dominant tradition of mentalism. Yet by overlooking the importance of conceptual stage-setting Wittgenstein-informed psychologists tend to make the same mistakes as their mentalistic opponents and threaten to end up in the repository of behaviourism. A Wittgensteinian account of “fictive mental states” shows that the concepts of the imagination and pretence are neither concepts simply referring to mental states nor to behaviour. Instead they are concepts the command of which requires a creative use of language on the child’s part. Struck by various sorts of similarities the child quite naturally applies a certain use of words beyond their primary domain of application. This transferred use of language is not the same as figurative and metaphorical language because the meaning of the words in the new domain cannot be paraphrased in other, literal terms. In that respect there is an interesting similarity between words expressing synaesthetic experiences and words for “fictive mental states.” Psychologists should pay more attention to how this creative use of language actually takes place.

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NOTES

¹ Carpendale & Lewis (2002) rely not only on Wittgenstein but also on his commentators, in particular Hacker (1990) & ter Hark (1990). They also rely on earlier Wittgenstein-informed developmental psychology, in particular Chapman (1987) and more recently Racine (2004).

² Carpendale & Lewis (2004) as well as Sharrock & Coulter (2004) have deleted them.

³ Wittgenstein 1953 §282; p. 216. Other references are to be found in Wittgenstein 1982 §795–800.

⁴ See Peter Geach (1957) for an early account of the transferred use of psychological language. Geach however neither relates this topic to the primary-secondary distinction nor to developmental issues in psychology or philosophy. The only sustained discussions about the primary and secondary use of words in Wittgenstein are to be found in Hintikka & Hintikka (1986), ter Hark (1990) and more recently Hanfling (2002).

⁵ As Diamond (1991, p. 228) observes, the point is not that in some cases one cannot use another word, but that this word will involve a similar shift from the primary use (“Wednesday is corpulent”).

⁶ Even Wittgenstein-informed psychologists have been misled by ordinary language here. For instance, Chapman (1987, p. 114) who briefly discusses the distinction between the primary and secondary sense of words, takes the former to refer to ordinary uses and the latter to changes in language of a metaphorical kind. But mental calculating *is* ordinary use, and is not, as shown below, a metaphor.

⁷ This is not to deny that the example of calculating prodigies can also be used as an unusual case that cannot be dealt with in the normal way.

⁸ This is different from behaviourism precisely because the behaviourist ignores that “mental calculation” is a secondary use of calculating. The behaviourist typically claims that mental calculating is a process like any other, and seeks to identify it with “covert behaviour.” As B.F. Skinner put it: “If there is an act which is equivalent to, or identical with, thinking of one hundred, it is the verbal response ‘one hundred’” (Skinner 1957, p. 447).

⁹ See also Harris (1995) on this point.

¹⁰ It is noteworthy that several authors refer to Austin’s definition of pretence (e.g. Lillard 1994). Austin’s article on pretence (Austin 1964) is a purely conceptual analysis.

¹¹ Lillard’s preceding reference to the role played by parents is in that respect exceptional, but note also that she particularly emphasizes their role in duping children and less their role in establishing a kind of agreement in responses.

¹² See Hanfling 1991 on this point. Hanfling’s discussion, however, is not about the psychology of pretence.

¹³ As a purely formal object it is even less similar to a primary representation than the more traditional mental images are to sensations.

¹⁴ Paul Harris (1995) tries to save Leslie’s hypothesis by supposing that quarantining involves a membrane that permits only one-way traffic, from the primary to the secondary representation but not conversely. But this is not a description of an actual mechanism but merely a metaphor. More importantly, the metaphor in fact hides the conceptual or logical point concerning the dependency of concepts, and not Leslie’s hypothesis.

¹⁵ Note that this formulation expresses in fact the logical point of the primary and secondary use of words as I understand it. Owing to the paradigm of mental representations, however, Lillard subsequently interprets “knowledge” in terms of mental representation. As a consequence, the “could not” is taken empirically rather than logically.

¹⁶ See J.D. Woolley (1995) p. 183.

¹⁷ Still, those children do not mean what a child would who makes believe that e.g. its doll is in pain.

¹⁸ This, I maintain elsewhere (ter Hark 1990), is the general tenet of Wittgenstein’s discussion of the concept of seeing-as. See also Geach (1957).

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