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Swimming and Speaking Spanish

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Abstract The dominant view of the status of knowledge of language is that it is theoretical or what Gilbert Ryle called knowledge-that. Defenders of this thesis may differ among themselves over the precise nature of the knowledge which underlies language, as for example, Michael Dummett and Noam Chomsky differ over the issue of unconscious knowledge; however, they all agree that acquisition, understanding and use of language require that the speaker have access to a theory of language. In this paper, I argue that this view is mistaken. Knowledge of language is properly seen as practical knowledge, knowledge-how. My target is Michael Dummett's treatment of theory of meaning in *The Seas of Language*. If my argument goes through, underlying assumptions about the nature of cognition as computational must be adjusted to allow for other forms of knowledge, which are arguably more basic, and which underlie knowledge-that.

Keywords knowledge · Dummett · language · meaning · practical knowledge · theoretical knowledge · practices

> And hence also 'obeying a rule' is a practice. And to think one is obeying a rule is not to obey a rule. Hence it is not possible to obey a rule 'privately': otherwise thinking one was obeying a rule would be the same thing as obeying it.
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> – Wittgenstein, *Philosophical Investigations*

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Introduction

Michael Dummett ends "Language and Communication,"[1] with the following passage.

> Philosophy of language takes its origin from a wonder at the power of language to possess a significance so greatly transcending the surface reality. Two people are talking together: that is to say, each in turn utters sounds of a certain kind. But we know that what is happening reaches far beyond the sounds that are all that is evident to gross observation: they are narrating events, asking questions, propounding hypotheses, advancing grounds and objections, and so forth. How is it that, by merely making certain sounds, they can do these complicated things?... The standard answer is that what they have in their heads is a theory of meaning, usually construed as a theory determining the truth-conditions of sentences of the language....
>
> ...[In order to account for the fact of communication,] there must be an adequate outward manifestation of understanding, consisting in a complex interplay between linguistic exchange and related actions....
>
> It is also this interplay towards which I intended to gesture by speaking of language as activity. What was meant was ...this: that the significance of an utterance lies in the difference that it potentially makes to what subsequently happens (Dummett, 1993, 186–187).

In this paper, I argue that Dummett's views of language and theory of meaning go no way toward explaining how language comes to play the role it does in human life. I defend the view that knowledge of language is properly classified as practical knowledge; moreover, only such an account can fully satisfy Dummett's description of the role of language. Specifically, my aim is to present an alternative to the view that knowledge of a language must involve 'a substantial theoretical component.' While there may indeed be theoretical aspects of knowledge of language, these are derived by speakers *after* reflection on a skill, which is itself grounded in practical knowledge. Our theoretical knowledge of language is, in short, no different from the theoretical knowledge which we might have of any skill.[2]

This claim has implications for theory of meaning, as well as for cognitive science and linguistics. The argument can be expanded to make a case against computational theories of cognition, which characterize human thought as based on explicit representations of rules, generalizations, grammar, language generation, etc. In this paper, I consider only the former; to engage in a full discussion of the computational model of cognition would take us too far afield of the aims of the present paper, so I leave it undiscussed here.

[1] In Dummett (1993), 183–187. In this paper, I address issues raised in the Preface and the first seven essays.

[2] In "Why Knowledge is Unnecessary for Understanding Language," Dean Pettit (2002) argues that knowledge-that is unnecessary for understanding language. His arguments are compatible with, indeed complimentary to, mine. My argument, however, focuses on the more general thesis that the acquisition of language, as well as one's ability to employ language as a system with multiple uses and to understand specific bits of language, does not depend upon any theoretical knowledge on the language learner/user's part. I do not discuss Pettit's argument here, and do not rely on any of his conclusions to make my case.

Knowing a Language

By insisting that language rests upon theoretical knowledge, Dummett removes the possibility that any 'practical' component of language could play a role in the explanation of the philosophically interesting and important questions about meaning, understanding, reference, etc.

> "What is a Theory of Meaning? (II)" was meant when it was written [1976], to be a definitive statement of my views upon the topic …it offered two incompatible conditions of [speakers' knowledge of a language], neither of them satisfactory. One is that knowledge of a language is simply a practical ability, like knowing how to swim, save for being immeasurably more complex … I now think that knowledge of a language has a substantial theoretical component; better expressed, that the classification of knowledge into theoretical and practical (knowledge-how and knowledge-that) is far too crude to allow knowledge of a language to be located within it (Dummett, 1993, ix–x).

> In cases of this intermediate kind, it seems to me, we have to take more seriously the ascription of knowledge to someone who possesses the practical ability in question: 'knows how to do it' is not...a mere idiomatic equivalent of 'can do it.' Rather, we may say of the agent that he knows *that* certain things are the case, that he knows certain propositions about how the operation is to be performed; but we need to qualify this by conceding that his knowledge is not *explicit* knowledge, that is knowledge which may be immediately elicited on request. It is, rather, *implicit* knowledge: knowledge which shows itself partly by manifestation of the practical ability, and partly by a readiness to acknowledge as correct a formulation of that which is known when it is presented (Dummett, 1993, 96).

I agree that ' …the classification of knowledge into theoretical and practical (knowledge-how and knowledge-that) is far too crude to allow knowledge of a language to be located within it.' But Dummett's response that this entails that knowledge of language is theoretical is mistaken, resting upon a misunderstanding of the nature of practical knowledge and skills. This allows him to treat the choice between practical and theoretical knowledge as exhaustive. When this is conjoined with his requirements for a theory of meaning, he is forced to the conclusion that knowledge of language is, indeed must be, theoretical.[3]

On Dummett's understanding, either a skill is non-intentional or, if intentional, rests upon knowledge-that. In place of this, I offer a middle way, one which is strongly redolent of Gilbert Ryle's initial discussion of the distinction between knowing-how and knowing-that. In the next section, I review Ryle's position.

[3]Throughout this paper, I treat Dummett as holding the view that knowledge of a language is theoretical *simpliciter*. I do so because any activity which has a theoretical component as a necessary condition for its performance cannot give practical knowledge (knowledge-how) anything but a peripheral role. Dummett holds that theoretical knowledge is a *prerequisite* of one's knowing a language, therefore, he can be so classified. This does not mean that if we come to know or discover the rules of some purely practical activity, say riding a bicycle, that all our knowledge of the activity itself suddenly assumes the status of theoretical knowledge. It is only if theoretical knowledge is required in order for someone to count as performing the activity that I classify knowledge of the skill as knowledge-that.

Knowing-*how* and Knowing-*that*

Gilbert Ryle introduces this distinction in *The Concept of Mind*, where his larger purpose is to dethrone the *intellectualist legend* – the view that any intelligent action must be analyzed as a 'double operation of considering and executing.'

> To put it quite generally, the absurd assumption made by the intellectualist legend is this, that a performance of any sort inherits all its title to intelligence from some anterior internal operation of planning what to do (Ryle, 1949, 31).

In its place, Ryle offers the following.

> What is involved in our descriptions of people as knowing how to make and appreciate jokes, to talk grammatically, to play chess, or fish, or to argue? Part of what is meant is that, when they perform these operations, they tend to perform them well, i.e., correctly or efficiently or successfully. Their performances come up to certain standards, or satisfy certain criteria. But this is not enough. The well-regulated clock keeps good time and the well-drilled circus seal performs its tricks flawlessly, yet we do not call them 'intelligent'. We reserve this title for the persons responsible for their performances. To be intelligent is not merely to satisfy criteria, but to apply them; to regulate one's actions and not merely to be well-regulated. A person's performance is described as careful or skillful, if in his operations he is ready to detect and correct lapses, to repeat and improve upon successes, to profit from the examples of others and so forth. He applies criteria in performing critically, that is, in trying to get things right (Ryle, 1949, 28–29).

Ryle's central point is that practical abilities – skills – are not associated with any lack of intention or purposiveness. Indeed, the core of his argument against the intellectualist consists in giving an account of how we can behave with purpose, intention, etc., in short, behave intelligently, without appealing to knowledge-that as a presupposition or a logical condition or a chronological precursor of so acting.[4] With this in mind, I now return to Dummett's arguments.

Dummett's Case

In one of P.G. Wodehouse's novels, a character asks a young woman whether she speaks Spanish. Her response, 'I don't know; I've never tried,' is amusing because speaking a language isn't something one can know how to do without at the same time, amnesia and other cognitive afflictions aside, being aware that one can do it

[4]In "Knowing How," Stanley and Williamson (2001) reject the distinction between knowing-how and knowing-that, arguing instead that knowledge-how is 'simply a species of knowledge-that.' In support of this they appeal to recent semantic theory, supplemented with the notion that propositions may have a '*practical* mode of presentation.' Their argument may seem to present a challenge for my claims here; however, even if it were correct, the actual problems are far less significant than one might antecedently imagine. The task of showing how human action is "informed by intelligence" still requires an account of the different ways in which this occurs. My account does this. Stanley and Williamson's arguments deserve a more detailed consideration, but this would take me well beyond the scope of this paper; therefore, I present my arguments here without attempting to address theirs, leaving that to another paper.

or without having in fact done it. This contrasts with skills like swimming. Here one may know what swimming is without ever having done it, and one may be able to swim without knowing that one can do so. If asked whether I can swim, the response 'I don't know, I've never tried' strikes us as neither absurd not amusing.

By itself this doesn't show that knowledge of language is not practical knowledge. There are other skills, more like language than swimming, which might provide evidence to the contrary. Dummett turns to the 'well-known and often fruitful comparison of a language with a board game' (Dummett, 1993, 103). Unlike our swimmer, a putative chess player can only advance to the ranks of genuine chess player when she applies or is guided by the rules of chess.

> . . . a move in chess has a significance not apparent to immediate inspection, a significance grasped by the players in virtue of their knowledge of the rules. It is a legitimate philosophical enquiry in what an individual player's mastery of the rule consists. Can it be a mere practical ability, or must it rest on knowledge, and if on knowledge, must that knowledge be explicit or can it be only implicit? (Dummett, 1993, 103).

Dummett's answer is that it must rest on knowledge-that, and that this knowledge may be implicit.

Like chess, language is 'a rational activity on the part of creatures to whom can be ascribed *intention* and *purpose*.' For Dummett, "the use of language is, indeed, the primary manifestation of our rationality: it is *the* rational activity *par excellence*" (Dummett, 1993, 104). Thus,

> . . . a speaker's mastery of his language consists. . . in his knowing a theory of meaning for it: it is this that confers on his utterances the senses that they bear, and it is because two speakers take the language as governed by the same, or nearly the same, theory of meaning that they can communicate with one another by means of that language (Dummett, 1993, 100–101).

By holding that theoretical knowledge is a prerequisite for knowing a language, Dummett warrants classification as an "intellectualist" in Ryle's sense of that term. If one follows Dummett in holding that language is "*the* rational activity *par excellence*," the intellectualist picture is very appealing. But, I argue, appealing as it is, it does not bear scrutiny.

Walking, Swimming, and Playing Chess

Dummett's argument assumes a distinction between two kinds of *skills*: on the one hand, those which are merely practical, and as such neither intentional nor guided; and, on the other, those which are both intentional and guided, and hence not merely practical. Knowledge-how fully accounts for the acquisition of skills of the first sort. By contrast, the second requires theoretical knowledge (knowledge-that); only such knowledge can account for the purposiveness and intentionality of these skills.

Swimming and Walking

The contrast between the intentional and purposive (chess and language) and the non-intentional and non-purposive (swimming), which is the pivotal point of Dummett's argument, rests on a vacillation between two senses of the term 'swim.' Sometimes he uses it to mean 'keeping one's head above water' or 'staying afloat'; at other times, he uses it to mean doing a recognizable stroke, for example the crawl.

When he says that we can reasonably say: 'I don't know; I've never tried,' in response to the question 'Can you swim?', 'swim' must be taken in the first sense. By contrast, when swimming counts as a genuine skill, the argument turns on the second sense. I shall show that in the first sense swimming is not a skill, and hence any features of how we know how to swim shed no light on the question of our knowledge of language – indeed, they shed no light on knowledge of swimming understood in the second sense.

There is a sense in which one may turn out to be able to swim without ever having learned to do so, without, that is, ever acquiring a skill. This is the sense in which swimming is nothing more than keeping one's head above water. But, this is not the sense in which one knows how to swim in the manner required to compete in swimming meets, pass swimming classes, and so forth; moreover, it is not even a step on the way to the acquisition of those skills. The contrast between staying afloat and doing the crawl lies in the fact that the former involves no criteria, it does not accord with rules, and most certainly is not guided by rules. There are *no rules* governing staying afloat, and this entails that, strictly speaking, it cannot be learned or taught.

Under the heading 'keeping one's head above water,' we count everything from frantic doggy-paddling to graceful breaststroke-like movements. It is not grace that makes for success here, all that matters is that one avoid drowning or getting too much water up one's nose. Apart from this, there is nothing that counts as right or wrong. It would make no sense to say to the 'swimmer': 'No, no, you move your legs like this, not like you're doing.' If he avoids getting too much water up his nose and spends very little time below the surface, he's doing just fine. If we choose, we may say that he's swimming, but we need to be clear that in such a case, 'swimming' does not count as a *skill* in any ordinary sense. However, it is only in this sense – this 'non-skill' sense – that it is reasonable, when asked whether I can swim, to say, 'I don't know; let's see what happens when I jump into the deep end of the pool.'

Compare this with the second sense – call it 'proper-swimming.' Here corrections are in order; it is possible to get it wrong, as well as right. Unless I am willing to count some movements as correct and others as incorrect, I am simply not engaged in proper-swimming. I may be keeping my head above water, I may be going back and forth across the pool faster than anyone else, but I'm not proper-swimming. Proper-swimming, unlike staying afloat, is a skill because the actions involved in it are subject to correction.

Skills have criteria associated with them. In virtue of these criteria (or rules), skills may be taught and learned, may be performed more or less skillfully. Bouncing a ball off a wall isn't a *skill*. However, if we keep score – 1 point for a clean catch; 0 points for a miss; −1 point if the ball goes into the street – then we may have a skill. Dummett's argument requires the contrast between a *skill* which can be accounted for entirely in terms of knowledge-how, and an intentional, purposive activity which requires knowledge-that. Swimming (as contrasted with proper-swimming) does not

provide this contrast. In Dummett's arguments, swimming is an activity which is *not* properly classified as a skill, with the result that the comparison tells us nothing about knowledge of language.

If we try to find something which is a 'skill without criteria,' we might consider walking. Here we have an activity which is not subject to assessment or correction (i.e., which has no rules), but which may nevertheless be said to be *learned*. In the normal course of events, a child is said to have 'learned to walk,' and in saying this we do not imply that the child has mastered a set of rules or even been corrected when first trying to move about on two feet. There is no getting it right or wrong – unless the child proudly announces 'Look at me, I'm walking' as she crawls across the floor. So long as the child is navigating on her own two feet without hanging onto the couch too often, she's walking. Perhaps we can substitute walking for swimming in Dummett's argument to make the case that skills which rest entirely upon knowledge-how are not like language with respect to how we know them.

But even this will not do. When we say that a child has 'learned' to walk, we only mean that the child has reached a certain point in her natural development; we do not have in mind anything like what we mean when we say that she has learned her scales or times tables. To classify walking as a skill is not an accurate a description of it. Like staying afloat, walking is less a skill, and more an instinctive behavior, a quasi-instinctive behavior if you will.[5] As such, it doesn't provide the contrast with language that Dummett needs for his argument.

In fact, there are three categories at play in Dummett's argument, and one of them is irrelevant to the discussion of a speaker's knowledge of her language.

C1 **Random or non-purposive activities**:[6] these have no criteria or rules; as a consequence they are not properly classified as skills at all. Staying afloat, walking and bouncing a ball off a wall fall into this category. Some are quasi-instinctive (walking and doggy-paddling to stay afloat), others are just unguided sorts of things we do to fill the time between lunch and tea (bouncing a ball off a wall).

C2 **Skills which we know-*how* to perform**: these have associated rules and criteria, they properly count as skills because there are correct and incorrect ways of doing them. Behavior in this category is neither random nor non-purposive, but, at the same time, agents are not required to have any knowledge-that of the rules. Proper-swimming is an example of this.

C3 **Skills which, for want of a better term, I call '*Reasoned skills*'**: these have rules and criteria associated with them, and one might well consider them to be skills, though most likely we would call them 'intellectual' activities to set them apart from the skills of C2. Rules play a special role in the performance of these activities; they may be explicitly appealed, not only to correct oneself and

[5]There is a case to be made for classifying language with walking. I do not consider this here for three reasons. First, it strikes me as simply false. Second, since it is not part of Dummett's argument, there seems no reason to consider it. Third, such a move would undermine any claim that *theoretical knowledge* is a necessary prerequisite for the possession of language.

[6]This isn't the happiest bit of terminology. Any randomness here derives solely from the absence of rules and criteria applying to the activities. There is no chaos or madness associated with this category of activities. However, I'll stick with this term since it captures what Dummett is after in his argument.

> others, but to plan one's next move. Hence to acquire and practice these skills, agents must possess knowledge-that of the rules. Chess fits in this category.

Since it doesn't concern skills at all, C1 is simply irrelevant here. What Dummett needs is the contrast between the different sorts of skills represented by the activities in C2 and C3. Between these, the crucial difference lies in the role played by rules *vis-á-vis* the agent's behavior, both in acquiring the skill and in its subsequent performance. The issue of central concern is what counts as mastery of these rules.

Following Rules

There are two senses in which one may be guided by something, including rules. On the one hand, there is a strong sense in which one may be actively taken in some direction. On the other hand, there is a weak sense in which the behavior in question can be described as being 'in accordance with' some set of rules. I mark this distinction by using 'is guided by' to signify the strong sense, and 'acts in accordance with' to signify the weak sense. Thus, in C3, rules *guide* practitioners' behavior, while in C2 the behavior *accords with* the rules.

Dummett uses swimming as an example of one's having mastered rules without having any theoretical knowledge of them. The sorts of activities associated with such rules are, Dummett claims, neither purposive nor intentional. Since language is both purposive and intentional, its rules cannot be understood in the same way that he takes the rules of swimming to be – i.e., the rules of language cannot be based on practical knowledge. Mastery of language *must* involve knowledge-that.

And surely Dummett is correct. If our choice for classification of language is limited to C1 or C3, we must surely opt for C3. But, in order to draw the conclusion that knowledge of language cannot be practical knowledge, i.e., to conclude that language belongs in C3, requires that Dummett prove that the choice between C1 and C3 is exhaustive.

My arguments to this point prove that Dummett fails to make *this* case, and that he fails to do so because C2 provides a third category, one which might accommodate language. In addition, my argument gives an indication of why some activities are classified as *skills*, rather than as something we just do. On my account, only C2 and C3 comprehend genuine skills. By contrast, C1 does not concern skills; therefore, any activities falling under it are simply irrelevant to the discussion.

I have not yet shown that language is properly placed in C2, rather than C3. This is essential for my argument that knowledge of language is properly classified as knowledge-how. In order to make this case, I first need to be more explicit about what counts as a skill. In the next section, I elaborate the notion of skills as practice-based, rule-governed activities.

Practices

In "Interpretation and Reality: Two Queries for Krausz" (Harrison & Hanna, 2005), Bernard Harrison and I use linear measurement to show how practices figure in the mastery of a skill and its rules.

> . . . what will [teaching someone the practice of linear measurement] involve? Teaching him to carry out measuring operations with rulers and measuring-

> tapes? Not *only* that. Someone who knew *only* how to go through the motions of measuring, even if he had been trained to say aloud or otherwise note the numbers corresponding to gradations on the yardstick, would not understand what measurement *is*. That person would have been converted into a kind of measuring-device himself: a tool, an element in the practice of linear measurement, not its master. To be a master of the practice …that person needs to understand the point of the practice: on the one hand, the purposes it serves in our lives, and on the other, what it is about it that enables it to serve those purposes. Only then will the learner be able to deploy the practice in the service of purposes of that type *of his own* (Harrison & Hanna, 2005, 95).

Building on this, the following is a rough attempt at defining a practice.

1. There must be criteria, or rules.
    - 1.1. The agent's behavior must accord with the criteria.
    - 1.2. The agent is accountable for his behavior's being in accordance with the criteria. In other words, the agent's behavior is subject to correction and modification.
        - 1.2.1. The behavior must be teachable and learnable.
    - 1.3. The criteria must be public.
2. There must be a point to the activity.
3. The agent must understand the point, and be able to use the practice for his own purposes.

   C2 and C3 differ from C1 because the activities in C2 and C3 fall under *practices*. A *skill* is an activity which has an associated practice. Therefore, C2, but not C1, concerns *skills* which may, for Dummett's purposes, be usefully compared to the skills in C3, which are skills with an explicitly theoretical component.[7]

But, one may wonder whether I have left something out of my analysis of practices. Is there, it might be asked, an additional requirement along the following lines?

4. The agent must know (explicitly or implicitly) the rules, and be guided by them in the strong sense that she acts *on* them, i.e., goes through the double operation of considering and executing.

If we accept 4, then C2 collapses into C3,[8] and Dummett's case is complete. Can I avoid this? I argue that the cost of adding 4 is simply too high – and too high for Dummett himself. It would require that we ride roughshod not only over ordinary intuitions about differences between various sorts of skills, but over Dummett's stated views, viz., that some skills are *merely* practical, while others are something more. In the next section, I show why 4 is not, in general, a condition of practices or skills.

[7]To maintain the connection to Ryle's arguments, the contrast between C2 and C3 is where he engages the intellectualist.

[8]One might argue that C2 collapses into C1. The discussion of swimming versus proper-swimming shows why I reject this description of the collapse.

Skills, Practices and Rules

Even if what I've said so far is correct, an objector might argue that all I have shown is that far more activities than we thought contain a theoretical component. The relevant contrast is still between C1 and C3. C3 has turned out to be larger than we initially supposed, but that's not a problem for Dummett. His claim can simply be read as follows: activities are classified as skills (my C3), rather than as quasi-instinctive or random behaviors (my C1), only if they have a theoretical component. With language and chess, one must know(-that) far more than one needs to know for swimming and watercolor painting, but the central point remains: only knowledge-that makes an activity intentional and purposive, i.e., makes it a skill. Adding 4 to definition of practice captures this nicely.

But this line of reasoning misses the point. I have shown that proper-swimming does not belong in C1, it is up to the objector to show that (*pace* Dummett) it belongs in C3, which requires that it meet condition 4. The objector must show that there is no alternative account of the rationality of skills like swimming except to add the requirement that the swimmer is *guided by* the rules (or criteria). This comes to the same thing as showing that C2 is either incoherent as a category or, while not incoherent, empty.

The objector's suggestion requires that we either demote many of the activities we take to be skills to C1, non-skills, or that we add a theoretical component to knowledge of all skills, including proper-swimming, bicycle riding, etc. But both alternatives are obvious nonsense. While the addition of a theoretical component, along with the double operation of 'considering and executing,' may not strike us as unreasonable in the case of chess, in the case of swimming it surely does. Yet swimming – proper-swimming – is certainly a skill, as Dummett himself claims. What, then, are we to do? There are three alternatives, none of which is acceptable.

The first is to hold that activities like proper-swimming have a limited life as skills. When we are first learning to swim, the theoretical component plays a significant role, we review the 'lesson' and then try to carry it out, we quite consciously follow the rules. As we become more adept, the theoretical component fades, finally dropping out completely.

At first glance, this seems reasonable; however, closer examination shows that it isn't. For one thing, it entails that proper-swimming begins life as a skill, a C3 activity, but later loses this status and moves into C1. Oddly enough, the transition from skill to non-skill occurs at precisely the point at which one becomes the most adept at the activity. But oddity aside, this simply does not accord with how skills work. Regardless of how adept one is at proper-swimming, so long as one engages in that activity, one is subject to the application of criteria, rules: one can be corrected, coached, etc. In other words, we are always accountable to the rules; if we fail to act in accordance with them, we cease to proper-swim. It is this accountability to standards (rules, criteria) which makes proper-swimming a skill, which sets it apart from merely staying afloat, and in virtue of which it retains its status as a skill over time.

The second alternative is to claim that being guided by rules depends upon deeply *implicit* – dangerously close to *unconscious* – knowledge, knowledge which is manifested in the proper-swimmer's swimming behavior. This is certainly a common enough position to adopt, and it is approximately Dummett's view of language. But

taken as a general view of skills, one might well ask what it actually tells us about a skill like proper-swimming? If the test of whether a person is proper-swimming is to see whether her swimming-like activities meet the standards of proper-swimming, then what is gained by adding that passing this test allows us to infer that she has knowledge-that of these standards, and, even more importantly, that she is guided by them in her swimming? Insisting that she is, somehow or another, appealing to rules which she implicitly knows, and that this is proved by her behaving as she does seems at best a wheel which turns nothing.

The third alternative attempts to show why we ought, nevertheless, to add a requirement of knowledge-that of the rules to distinguish skills from non-skills. This alternative maintains that an agent's being subject to correction isn't enough for an activity to count as intentional and purposive. At the same time, it does not maintain that the agent's knowledge of these rules must be a bit of active, guiding, albeit tacit, knowledge in order that the behavior count as performing the skill. Instead, the third alternative holds that the agent must stand ready, after some reflection perhaps, to acknowledge the rules as the rules which are being followed. It is this *acknowledgment* of the rules that marks the difference between a skill and a non-skill. Thus, the question is whether or not agents are required to be able to acknowledge the rules when presented with them. This would allow us to make the difference between C2 and C3, and C1. While only C3 passes the test of one's having (explicitly or implicitly) knowledge with guides one's behavior, both C2 and C3 pass the test of acknowledgment. C1, by contrast, fails both tests.

In the case of chess, this seems quite reasonable. Chess players are guided by the rules of chess, and they acknowledge them; they appeal to them in the course of playing a game; even if a player hadn't thought of the rules *as the rules*, upon being presented with them, she will do so. If someone refuses to agree that a chess-King can move in any direction, but only one square at a time, she just isn't playing chess.

But do we hold proper-swimmers to the same standard? Clearly, the answer is that we don't. At no point is anyone required to acknowledge the rules of proper-swimming on pain of losing his standing as a proper-swimmer.[9] Some proper-swimmers may be able to recognize the rules when presented with them, some proper-swimmers may even be able to come up with statements of them on their own with no prompting or access to a swimming manual. But no one is ever required to do so. If this were the case, then it would turn out that many of the most accomplished swimmers are nothing more than mere mimickers, no better than rats running a maze.[10]

This seems to take us back to our starting point. On the one hand, we have the view that skills require knowledge-that, and anything which does not require such knowledge simply is not a skill. On the other hand, we have the view that at least some skills do not require knowledge-that. On the face of it, the first involves a *petitio*, or, at the least, is an unargued claim. Dummett's treatment of swimming indicates

[9]I don't deny that this is a controversial claim. I hope the present arguments stand on their own, without the need of taking on the issue of rule-following in all its details. For a fuller discussion of rule following, see *Word and World: Practice and the Foundations of Language*, Chapter 8.

[10]Applied to language, this alternative would entail that many seemingly competent speakers should be classified in the same group as parrots. This is a reason against this view, but I won't pursue it here.

that he is at least willing to entertain the possibility that there are skills which do not require knowledge-that. Therefore, I shall proceed on the assumption that my arguments have proved that C2 is a coherent category, and that it has at least some members: proper-swimming, bicycle riding, and other like activities.

It is still an open question as to where language belongs. Dummett argues that language belongs in my C3, and that speakers know the rules of language tacitly – the second alternative. The evidence for this consists in their speaking and understanding language as they do; this linguistic behavior is a manifestation of this knowledge-that. In order to see whether his version of the second alternative can be make without begging the question, we must turn to the requirements he places on theory of meaning.

What *is* a Theory of Meaning?

In "What is a Theory of Meaning? (I)," Dummett gives five requirements for any successful theory of meaning (Dummett, 1993, 22).

M1 It must be atomic, or at least molecular.
M2 It must be full-blooded.
M3 It must be rich.
M4 It must give an account of what anyone must know in order to count as knowing a language. Another way of putting this is to say that the theory of meaning must be a theory of understanding.
M5 It must explain what it is for a speaker to have this knowledge.

> A theory of meaning will, then, represent the practical ability possessed by a speaker as consisting in his grasp of a set of propositions . . . The knowledge of these propositions . . . can only be an implicit knowledge (Dummett, 1993, 36).

Accepting these, particularly M4 and M5, entails (with no *petitio*) that knowledge of a language must be knowledge-that; this would warrant the addition of 4 to the definition of practice ("Practices"). In the next section, I argue against accepting M4 and M5 by considering a new example, one that is even higher on the 'intellectual' scale than swimming, chess or linear measurement.

Counting is a skill as purposive, intentional, and thoughtful as anyone could desire. The results of counting can stand at the center of scientific inquiry; counting rightly or wrongly can have dramatic effects on our lives. If chess is deliberative, counting certainly is. If there's any reason to suppose that chess is in the same category as language, then so too is counting. I argue that learning to count does not require knowledge-that. If this argument succeeds, it provides a case of an intentional and purposive activity which does not require the sort of active guidance by rules which entails some form of acknowledgment of the rules. At the same time, the case undercuts the reasonableness of M4 and M5, and provides an example of a C2 skill.

Counting

In "Counting," L. Goddard offers an account of a child's learning to count. Although his aim is to argue against Russell's claims that "the notion of similarity is logically presupposed in the operation of counting, and is logically simpler though less famil-

iar" (Goddard, 1961, 223), and that the definition of number is to be given in terms of similarity, not counting (Goddard, 1961, 223), his description of how counting is learned and how it functions shows that the introduction of a theoretical knowledge of rules is unnecessary. Thus, it provides a case of an intentional, purposive, or guided activity which does not rest upon knowledge-that. This proves that such knowledge is not required for skills, thereby eliminating the need for anything like condition 4 ("Practices").

> It is easy for a child to learn the counting rhyme. By this I mean that a child can be taught to say the numerals 'one', 'two' 'three',..., until he catches on to the fact that there are certain key words ('twenty', 'thirty',...,'a hundred',...) and certain repetitive patterns (after 'thirty' you say 'thirty-*one*', 'thirty-*two*',... and so on). It is rather like learning those special kinds of nursery rhyme which are composed of repetitions with minor twists, some of which are such that the last line leads back to the first and the whole thing can be repeated indefinitely. So the child learns an endless routine by catching on to the rather complicated rules about repetitions (Goddard, 1961, 224).

What is of interest here is Goddard's claim that the child is not taught the counting rhyme by being *given* (whether innately or through instruction) the 'rather complicated rules about repetitions' or by being required to figure out what these rules are. Instead, the child *catches on* to the rules or criteria in *action*, by being shown and told what to do, corrected when he gets it wrong, praised when he gets it right, and so forth.

> These rules [of repetition], which are rarely if ever stated explicitly, are important because there could be no counting without them. But the child who has learnt the counting rhyme has not yet learnt to count. The difference between the counting rhyme and a nursery rhyme is that the former can be used: it can be applied; and when it is applied correctly – that is, in accordance with more (though different) rules – the child can count (Goddard, 1961, 225).

To move the child beyond the counting rhyme and teach him to count requires, on Goddard's account, something like the following.

> We show a child a finite collection of objects, say the following,
>
> x x x x x
>
> and we instruct him to point to (say) the left-hand object and say 'one', next we tell him to move his finger to the adjacent object on the right, point to it and say 'two.' And we explain that he is to carry on in this way, saying the numerals he has learnt in the rhyme and pointing to the objects in turn. He makes mistakes and we correct him until he has learnt to associate (one-one

> correlate) his counting rhyme with his moving finger … we might say to him: when you get to the end and say 'five', start at the beginning again and say 'six', and then carry on in the same way. Now he can count … His endless verbal routine has been associated with an endless pointing routine (Goddard, 1961, 225).

At this point, the child has a use for the counting rhyme, in other words, he can count. But simply counting as defined here – which we might call 'point-and-say counting' – doesn't exhaust what we ordinarily include under the heading 'counting.' At the very least, this something more includes what Goddard calls "controlled counting."

> We say to him: if you want to know *how many things there are*, count (point and say, beginning at the beginning) until you come to the end; then stop. What you say then ('five', e.g.) is the number of objects there (Goddard, 1961, 226).

This summary is enough to show that a complex and deeply rational activity such as counting does not require at any point that the learner acquire or access a theoretical component (knowledge-that). Nor does it require the artificial introduction of the double step of 'considering and executing' to account for its intentionality and purposiveness.

Goddard asks whether knowing the rules (knowledge-that) is conceptually prior to counting, controlled counting, and so on. His answer is that it isn't. In learning to count and then to put this newly acquired skill to use, the child isn't taught rules which *guide* his behavior; instead, he's corrected and shown things.[11] In his subsequent pointing and saying, counting and controlled counting, he simply does what he's been taught, he just goes on, acting *in accordance with* the rules. There is never any need for a double step of 'considering and executing.' If the child is counting, and answering questions like 'How many?', without knowledge-that, why should we introduce knowledge-that of rules as a condition of counting? Goddard's answer is that there is no reason to do so.

There is something beyond simply saying the words, even beyond saying them in all the appropriate ways, that's necessary for acquisition of a skill, but it is *not* theoretical knowledge of the rules. As the child learns to count, he begins putting his new skill to various uses of his own, for example, making sure that Mother didn't give someone else more tea cakes. Putting the skill to use in this way is one of the signs that the child is mastering the practice and acquiring the skill. As already noted (see quoted passage at the start of "Practices"), the acquisition of a skill consists in coming to use the skill for one's own purposes.

Moving from the counting rhyme to counting does not require that the child begin appealing to rules or that she learn them, either explicitly or implicitly. With both the counting rhyme and 'point-and-say counting' learning is more akin to learning a nursery rhyme by heart than to learning language; unlike the nursery rhyme, however, the counting rhyme and 'point-and-say counting' are part of a set of practices which have a purpose. It is only at the stage of controlled counting that things begin to look more like language; it is only here that we might be tempted to

[11] This correction goes on long after the child leaves the explicit learning situation; it's part of engaging in a practice to be told when one gets it right or wrong.

introduce the requirement that the learner must have theoretical knowledge of the rules governing the activity.

Goddard, however, uses *purpose* or *use* to mark the change to the character of the activity which occurs at this point. If the child comes to be able to put the learned activity to some use, to his own use, then he has moved from counting (point-and-say counting) to controlled counting. But the difference in the behaviors involved in 'point-and-say counting' and controlled counting lies in what the counter can do with them. Controlled counting is a full-fledged practice which yields intelligent, intentional, purposive, &c. behavior, it can be put to use by the agent. But controlled counting satisfies only conditions 1–3 in "Practices", and, thus, is properly placed in C2, not C3.

But is this Really Counting?

As I have used it, Goddard's case cuts against the grain of many deeply entrenched views on word-meaning. In order to use the case to argue that languages belong in C2 skill, I need to show that Goddardian controlled counting really is *counting*, as we ordinarily understand it. One of the reviewers for this journal challenges me to show that "the rules of repetition . . . are not know-that rules," and that the association of count words with the number of objects is not itself an instance of knowledge-that. Failing to do this will, in the reviewer's judgment, undercut my placement of language in C2. The reviewer sums it up as follows: "If a behavior seems like rule-following, then it would be more probable to suggest that actual rule-following (though implicit) is taking place, than to argue against it, even if such a possibility exists."

This objection turns on the claim that in order to count, the child must associate the count words with the number of objects. This picture of meaning is certainly common. Whether one holds that meaning arises from a connection between a word and something in the 'external' world (meaning-externalism), or between a word and an idea or concept 'in the head' (meaning-internalism), on such a view, the child is counting only if she associates 'two' to the number *two*, or at least to the number of objects in front of her. If we accept this, then we must give an account of how the child acquired this *connection* between the word and its meaning or significance. It is easy to suppose that there must be some sort of rule, propositionally available to the child, which accomplishes this. To learn the connection between the word and its meaning, the child must have *knowledge-that* of the rule.

Elsewhere, I have argued against this view of meaning in detail (Hanna & Harrison, 2004), but the case here doesn't turn on these arguments. Goddard's discussion of counting can be used to undercut the picture of meaning and its implications for knowledge of language by challenging certain well-known views of rule following. Part of the point of Goddard's account is that no such association, with its attendant connecting rules, to make full sense of counting – of understanding what 'There are six cakes here' means. In place of some association between the word and its significance, what gives meaning to 'six' is the practice, the activity of counting, all the way from the counting rhyme to controlled counting. I use Goddard's argument to introduce an alternative to both meaning-externalism and meaning-internalism by emphasizing its implications for understanding rule-following in a way that does not rest upon knowledge-that. The next step is to show that this alternative works in the case of language.

Summary of Argument to this Point

So far I have established the following.

a. That, *pace* Dummett, there are three categories for classification of what might be called 'skills.'
b. That of these three, only two (C2 and C3) are properly described as concerning rule-governed behaviors.
c. That one of these two categories (C2) does not require that practitioners have any theoretical knowledge, either explicit or implicit, of the rules or criteria.

    c.1. A corollary of this is that analogues of Dummett's M4 and M5 do not characterize skills in general. While C3 skills may satisfy M4 and M5, or analogues of them, along with the proposed condition 4 "Practices", C2 skills do not

d. That there is at least one member of C2, viz., controlled counting.

In the next section I argue that along with controlled counting, language belongs in C2.

Language as Practice

In many respects, including how it is learned, counting is much more like language than either swimming or playing chess. Gifted Martians aside, most of learn to play chess through a process of explicit instruction, often supplemented by reading about and studying the game. Goddard's account shows that this is not how a child learns to count. It is equally obvious that it is *not* how we learn language.

Just as Goddard's child begins with the counting rhyme, and from there moves on to counting, controlled counting, addition, an understanding of transfinite numbers, &c. through a prolonged process of imitation and 'going on,' a child learns language, as Quine reminds us, 'at his mother's knee.' The child starts with imitation, he is encouraged, he is gently 'pushed' this way, and 'pulled back' from that way. Thus, the child is introduced into the full array of practices which make up language. There is no sharp delineation between learning to speak a language and being a full-fledged speaker, no break marked by acquisition of some bits of knowledge-that. At no point in the process is the child required to learn rules of meaning or even to be able to recognize them. Most of the time, the child is never even given the rules which constitute language. The child's introduction into the practices which make up language is not, *pace* Quine, accomplished by some sort of behaviorist training. The child mimics, but by itself, this does not constitute learning. In order for learning to occur, the child must 'catch on' – catch on to the practices, to their standards and criteria; catch on to using these practices for purposes of her own; catch on to the power these practices give her to affect outcomes and changes in her environment. In short, the child must catch on to all the things Dummett tells us language can do.

We succeed in speaking to one another, in arguing, in presenting reasons, in pleading, and so on, only because we each hold ourselves and others accountable for acting in accordance with the standards of the practices which constitute a language. This is simply to say that we are subject to correction. It is this constant reminder

from the linguistic community of what we say and what we don't that keeps us on track, that allows us to use language to do all the things that it can, including making changes in what subsequently happens. Language is possible because we form a community of users engaged in a shared set of practices; as members of that community, we are responsible both for acting in accordance with and for 'enforcing' the rules.[12]

But to say that we enforce the rules is only to say that we show each other how to go on. It is not to say that we recite the rules to one another.[13] It is not because I can recite my grammar or theory of meaning, or because I can be cajoled into acknowledging rules of my language that I am able to speak it. I can use language – speak and understand it – because I do what I have been taught to do. I begin in imitation and end in mastery.[14]

If we want to nod in the direction of implicit knowledge and say that the rules are internalized – something I would advise against – this can only mean that the child becomes part of the linguistic community, and thus subject to all its criteria and standards. It would be less misleading to say that it is the child who is *internalized* by becoming a full-fledged member of the community to which the practices belongs. This occurs when the child learns how to act, not when he gains some or discovers some bits of knowledge-that. But if this is so, then language, like counting and measuring is a practice grounded firmly in knowledge-how – i.e., a C2 skill.[15]

Language Learning and the 'Poverty of Stimulus'

Someone might object that this has gone a bit fast. No matter how plausible C2 may be as a category of skills, no matter that we can imagine language's being understood without appeal to rules, there is a strong reason in favor of placing language in C3 rather than C2. One of the anonymous reviewers raised the following objection.

[12]This should not be confused with Kripke's arguments in *Wittgenstein on Rules and Private Language* that the rules are the rules because we enforce them (Kripke, 1982).

[13]Nor is it to say that we always make such corrections. Any number of things may cause me not to offer a correction in a given instance – the person may be too timid for me to want to embarrass him, or too mean for me to want to risk the bodily harm that would surely follow – but such cases do not alter how the rules of language function and are sustained.

[14]If the community were to fade away, leaving only me, I might seem to be speaking the old language, but without the judgments of others to ensure that I follow the old practices, it would soon cease to have any meaning. My situation would be even sadder than the people at Section 207 of the *Investigations*; having no one to interact with I would not even be able to give the impression that my sounds were not superfluous.

[15]In fact of the cases discussed here, chess is the only that belongs in C3, though I may believe this only because I'm such a terrible chess player that I can't conceive of doing it without constantly having all the rules firmly before me.

There is a significant difference between chess, on the one hand, and measuring, counting and language,on the other. The last three all have a point, they can be put to various purposes; chess, by contrast, does not have a point, and it cannot be used by a chess player for his own purposes. Exploring the significance of this in anything approaching adequate detail is far beyond the scope of this paper. My intuition is that it is related to certain problems which I see as arising from the computational model of mind, and from trying to draw conclusions about natural languages based on features of formal systems; however, the distance between having the intuition and putting pay to it, is at least another paper long.

> . . . [w]ork in the Chomskyan tradition, following the 'poverty of the stimulus' argument, has shown that the amount of negative feedback from the environment is not enough to account for language acquisition. Language is much too complex, and evidence of negative feedback is much too sparse to account for it.

According to this Chomskyan objection, even if we suppose that it's possible to imagine someone's acquiring language without appealing to propositionally known rules, the fact of the matter is that such an account does not accord with what actually happens. Children acquire language much too quickly, and, worse yet, on the basis of far too little evidence for an account such as mine to capture the facts of language acquisition. Language belongs in C3 because it is only by attributing knowledge-that (innate knowledge-that) of the rules of language to the child that we are able to explain how acquisition actually occurs.

As compelling as it might seem, this objection misses the point of my arguments. I am not concerned with the mechanics of learning, but with the *conceptual* requirements for explaining someone's possessing a skill. Goddard's account of learning to count shows that, even if one agrees that an appeal to theoretical knowledge of rules could account for the acquisition of some intentional and purposive skill, attribution of knowledge-that of the rules of the activity is not the only option available for acquiring the skill.

The confusion in the objection traces in part to a mistaken assumption that I am advancing a behaviorist account of language acquisition. Goddard and I are not committed to such an account; nor does my account depend upon any such commitment. It is open to me to appeal to all manner of 'innate' endowments or mechanisms to account for our ability to 'catch on' to counting or language.

That humans do acquire language in a relatively short period of time, and on the basis of exposure to very little 'good' data, is not at issue. But the same is true of walking. Children 'learn' to walk in a very short time, with virtually *no* 'input.' There is no reason to demand knowledge-that of the physiology of walking, the rules of maintaining balance, and so on in explaining this feat. My argument is designed to show that there is no reason to do so in the case of language. More significantly, my arguments show that abandoning claims of knowledge-that of the rules of language does not force us to abandon claims about language's standing as a rational, purposive and intentional activity. For this, all that I am required to establish is that it is not necessary that all of these endowments consist in or rely upon knowledge-that of propositionally available rules. Behavior which 'seems like rule-following' is, as Ryle tells us, far more varied than the intellectualist legend would have us believe.

Conclusion

I have shown that Dummett simply builds the requirement of knowledge-that into his theory of meaning. I have presented reasons against doing this. My goal has been to provide a convincing case that a Wittgensteinian-inspired picture of language as a skill meets the challenges set by Dummett, and does so better than Dummett's own account.

The view defended here explains why language has the wide-ranging functionality which Dummett correctly identifies, including its power to let us make differences '…to what subsequently happens' (Dummett, 1993, 187). Language functions as a vehicle of thought and allows us to communicate with one another, and to do any of the myriad of things we do with it because it is part of the warp and weft of human life. The interplay between linguistic exchange and related action finds a natural place in the practice conception of language. On this conception, language is a practice (more accurately, a set of practices) of a community, and it is only in virtue of this that it can meet Dummett's high, though quite reasonable, expectations. The arguments of this paper show that none of this requires the introduction of knowledge-that. If, indeed, language is to be *the* anything *par excellence*, it is the human activity or skill *par excellence*.

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