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Reductionism and	l externalism	in the	philosophy	of mind
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#### SUMMARY

This book combines two topics. First, there is the claim that our folk-psychology reduces to some future neuro-physiological or functional theory. Secondly, there is the current trend of externalism. I argue that the latter causes trouble for the former. If externalists are right, the "highest common factor" analysis of our psychological states that underlies the reductionist project is mistaken. This undermines the reductionist claim that our folk-psychological practice must either reduce or must be eliminated.

The argument presented here offers a twist on Putnam's famous multiple realizability argument. According to Putnam's famous argument, psychological states can be realized in different ways. Differently realized psychological states qualify as the same kind of psychological state, say being in pain, because they share a common functional property.

But what if we reject this assumption? What if a particular kind of psychological state, say the belief that it rains, is not characterized by a shared functional feature, or any other common non-psychological aspect? What if what counts as the same psychological state within our everyday practice makes up a rather diverse category? If so, this shows that our need to understand one another functions as a norm that allows us to group together diverse states into the same category.

When we recognize the need to understand one another, we must admit that inter-theoretic relations come in more varieties and are a more complicated affair than some reductionists have assumed, to the extent that the reductionist framework only applies to a limited amount of cases. One case that falls outside its range is the relation between reductionist theories about our psychological states and our everyday folk-psychological practice.

### PART I

## Chapter 1

Reductionism, some formalities and some controversies

According to Nagel, a reduction is a relation between the statements of two theories, where the statements of the theory to be reduced are derived from the reducing theory. This derivation requires scientific hypotheses, or bridge-laws, that connect the theoretical terms of both theories. These hypotheses state that what a particular term of the reducing theory refers to is the same as what some term of the theory to be reduced refers to. Now, these bridge-laws are bound to be controversial. Reductionists claim that psychological states are, for example,

internal neuro-physiological states, while anti-reductionists deny this. Not a good start for a fruitful discussion, it seems.

Fortunately, some reductionists, for example John Bickle, currently champion a new brand of reductionism, called new wave reductionism. New wave reductionism promises to give the discussion a positive turn. According to new wave reductionism, a psychophysical reduction does not require Nagel's controversial bridge-laws. Instead, we can turn things around. The relation between psychological states and, for example, neuro-physiological states is not an assumption needed for a reduction to go through. Instead, it is a conclusion that follows from a successful reduction. If there is a smooth fit between the theory to be reduced and the reducing theory, we can retain the explanatory terms of our folk-psychological practice. If there fails to be a match between these two theories, folk-psychology should be discarded.

I agree that new wave reductionism is an improvement over Nagel's brand of reductionism. The good-standing of a theory and its theoretical terms may depend on inter-theoretical relations. Problematic about this new brand of reductionism is its narrow view on inter-theoretic relations. Theories should either reduce or be eliminated. This, I believe, is a rather presumptuous attitude.

I present the following argument against new wave reductionism. According to Putnam, the same psychological state can be realized in different ways. According to Bickle, this is no problem for reductionism. Bickle rightly shows that multiple realizability is not peculiar to psychology. It is also found in other areas of scientific research and there it presents no obstacle to the reduction of one theory to another. This is a correct response to Putnam's multiple realizability argument, but there is a catch.

As Bickle very briefly observes, there is another possible response to Putnam's argument. While the above response grants Putnam's assumption that psychological states can be realized in different ways, this assumption may be challenged. What if what counts as the same psychological state within our everyday practice makes up a rather diverse category? Bickle supposes that if the multiple realizability assumption is challenged, Putnam's argument will not go through and this is good news for reductionism. But is it really?

Suppose that there is no common non-psychological component shared by psychological states that belong to the same type. If so, we may wonder why we ever count as both believing that such and such is the case. Bickle thinks this is no problem for reductionism. If psychology fails to be reducible, it simple has to be eliminated. So much for our psychological practice. But where does this leave our understanding of each other?

Bickle tells us to discard our only means of understanding each other's behavior without offering a viable alternative. I believe that Bickle's conclusion that our folk-psychological practice must be discarded is therefore too hasty. Our

folk-psychological practice should only be discarded if this practice does not match with some future scientific theory and this future scientific theory offers a better explanation of our behavior than our folk-psychological practice. We should not be left empty-handed.

This demand that we should not be left empty-handed implies a more moderate form of reductionism, where the reductionist framework is not applied a priori.

## Chapter 2

### McDowell; a short introduction

McDowell's philosophy constitutes a major challenge to the common understanding of our psychological states. According to McDowell, there are no psychological states over and above subjects and their behavior. There are no psychological states that mediate our interaction with the world. According to McDowell, talk about psychological states describes the way subjects interact with the world around them.

What McDowell objects to is the following idea. Whether I correctly believe that it rains or whether I incorrectly believe that it rains, in both cases the content of my belief is determined by the same representation. Contrary to this suggestion, McDowell insists that it is enough if we state in the right way what people believe. No representations are needed. When I correctly believe that it rains, the content of my belief coincides with what is the case. When I mistakenly believe that it rains, we merely act along to make my behavior understandable. Using different methods, we ascribe the same belief. It is not my psychological states that are strictly speaking the same. This similarity is generated by the norm that governs our interpretative practice and that dictates which method we should use to understand each other's behavior.

I argue that there are two ways to understand the normativity of our psychological practice. Either, norms are essential to the content of our psychological states. Here, norms are needed to provide a common component shared by true and false beliefs. Or, as McDowell suggests, norms only govern our psychological practice. Norms regulate our interpretation of each other's behavior, such that our behavior becomes understandable.

According to McDowell, as there is no common component shared by true and false beliefs, norms are only needed to regulate our interpretative practice such that we ascribe psychological states that make our behavior intelligible. The first understanding of the normativity of our psychological practice saddles us with a too demanding ontology.

### REDUCTIONISM AND EXTERNALISM

### Conclusion Part 1

The case against reductionism that starts to emerge is the following. Why is it mandatory to think that here is literally a common non-psychological feature underlying our shared psychological states? Could it not be that the norm that figures in our interpretative practice regulates our belief-attributions and allows us to group together diverse states into the same category?

## PART II

## Chapter 3

## Externalism

Externalism is a hot topic within the philosophy of mind and this position has gone through some major changes since Putnam first put the issue on the agenda in his famous paper "The Meaning of 'Meaning'". Initially, externalism consisted of the claim that what we think depends on the world we inhabit. More recently, externalists also argue that there is not one rigid method or scheme capable of specifying the content of our thoughts. Instead, the content of our thoughts is context-dependent. It is this latter claim that puts externalism into opposition with reductionism.

Internalists, whether Cartesianists or materialists, believe that the mind is a box the content of which is determined by what is inside the box. Then Putnam published his famous paper and argued that what I believe is determined by the world I inhabit.

To hold on to the relevance of what happens inside the head, philosophers defended the idea of narrow content, i.e. content that merely depends on how it is inside, or they argued that there is nothing wrong with talk of internal states as such; as long as these internal states are connected to our environment.

In a paper called, "Putnam on Mind and Meaning", McDowell argues that Putnam's thought-experiment not only shows that meanings ain't in the head, it also shows that the mind ain't in the head. According to McDowell, anything contentful is already intrinsically connected to the world. To think otherwise is to leave the door wide open for skeptical doubts.

After the publication of McDowell's paper, Putnam has jointed McDowell in his defense of broad world-involving psychological states. According to Putnam, the notion of narrow content does not make sense and the idea that there are internal states that are somehow connected to the world implies that there is a

common feature. However, we have no reason to believe that such a common feature exists.

Finally, Charles Travis argues that what there is to think is an occasionsensitive matter, because what there is to think is as varied as what may be the case. There is not one set of objects and a set of properties that together determine all we may ever think.

These externalist arguments imply that our current environment is essential to our psychological states and this causes trouble for the reductionist project.

The open-ended nature of our interpretative practice results from the fact that we have to take both the current environment and the subject's behavior into account. Given the case at hand, we evaluate which is most important to determine the content of our thoughts. This implies that new facts may always come to light that force us to reconsider our belief attributions. Reductionists who claim that there is a better alternative to our everyday interpretative practice must show that belief attributions may rest on less evidence, thereby avoiding the open-ended nature of our folk-psychological practice. So, reductionists, for example, argue that we do not need to look at the current environment, but that it is enough to look at past environmental circumstances.

If the externalist arguments are right, this is not a valid option. Belief attributions that try to avoid the open-ended nature of our interpretative practice by relying on fancy notions of representation underestimate the extent to which the content of our thoughts depends on current environmental contingencies.

## Chapter 4

### Vehicle and Content

According to radical externalists, we should not connect what is inside, i.e. vehicles, with what is outside, i.e. content. We should not, because we should not reason from sub-personal level vehicles to the personal level content. The physical features of a particular state do not imply anything about what this state represents; and what it represents does not imply anything about its physical features.

Now few have been so radical. Quite some philosophers feel that what happens inside must matter to some extent. Ruth Garrett Millikan, for example, claims that there is nothing wrong with the internalist framework as such; what is wrong is the explanation it offers as to how these internal states are understood. Susan Hurley argues that normative considerations that bear on our psychological attributions should be supplemented by functional considerations. I argued that neither of these two suggestions validates a relation between the sub-personal level and the personal level that bears on the content of our psychological states.

The only valid suggestion, I believe, is McDowell's distinction between enabling and constitutive explanations. According to McDowell, there is an explanation as to how we are able to be the competent thinkers we are; and there is an explanation dealing with the content of our psychological states. These should not be confused. McDowell's distinction implies that content is determined at the personal level, while the sub-personal level may only falsify our psychological attributions without itself attributing to the determination of content.

I believe that these two explanations should not be confused, because they each involve a different kind of grain. Talking about capacities, we are concerned with our ability to see shapes and colors. When we talk about the content of our psychological states, we talk about the familiar objects around us, for example tables and cats. It is because of this difference in grain that there is no systematic connection between the personal and the sub-personal level.

## Chapter 5

Psychological content, the real thing versus explanatory relevance

The current brand of externalism and the arguments against the vehicle/content confusion show that these anti-reductionist arguments are not so must directed against the reductionist attempt to specify the content of our psychological states. Reductionist alternatives are rejected, because of their failure to account for the connection between the content of our psychological states and our behavior.

That it is this issue that troubles reductionism has often gone unnoticed, because of the peculiar thought-examples used. We are often told to consider cases where I have the same experience, where in one case I have a correct belief that such and such is the case, while in the other case I am mistaken. As my internal make-up is the same while the environment differs, it is concluded that it must be my internal state that is responsible for me having the same experience and that it must be my internal state that explains why I behave the same in both cases.

Using a more everyday example, I show that the idea of psychologically relevant internal representational states is question-begging. The required explanatory role can only be performed by these internal states when we assume that someone's entire internal make-up is duplicated, just as the famous thought-experiments assume. This, however, leads to a useless sameness criterion to understand one another in everyday life.

One argument that I take to show that what is really going on and what is needed to do the explanatory work cannot coincide is Lynne Ruder Baker's argument stated in her paper "Dretske on the Explanatory role of Belief". There Baker shows that indication always does the real causal work, but indication does

not solve the problems of intentional in-existence and referential opaqueness. Representation solves these problems, but it does not do the real causal work.

Given the problematic connection between psychological content and our behavior, we should come to the following conclusion. There are two stories to be told about the content of our psychological states. One story takes account of all the details and simply tells what is the case. Another story explains our behavior. There is no story that simply describes the current state of affairs and that offers an explanation of our behavior. What happens inside the head are details that are to be left out of consideration if we want to understand each other's behavior.

#### Conclusion Part II

Reductionists think that they can have it all, i.e. tell the one and only real story and offer a useful explanation. If I am right, this is a too ambitious project.

Given our explanatory needs, for example the need to understand each other's behavior, we have to pick out particular facts and ignore other facts. Which facts we should pick out is dictated by our need to understand one another. Now, what does this imply for reductionism that has never bothered about a theory's explanatory concerns?

### Part III

### Chapter 6

## Truth and Explanation

Reductionists, for example John Bickle, seem to reason as follows. Both psychological states and internal states explain our behavior. Given that they each explain the same phenomenon, these states ought to be related in a simple way. Put differently, if two theories explain the same phenomenon, then there must be a simple connection between the theoretical terms of both theories. However, this conclusion is drawn too quickly.

As argued, explanatory concerns allow us to pick out particular facts and ignore other facts. If so, explanations that serve different explanatory concerns rely on different evidence to get the explanatory job done. As such, there will be no simple connection between the theoretical terms of both theories. These terms will not be related as higher and lower levels. So, the above reductionist argument is mistaken. Leaving explanatory concerns out of the equation, reductionists get what they want too easily.

To take a theory's explanatory concerns into consideration, we should not only consider the way theories at different levels are related, as Bickle does. We should

#### REDUCTIONISM AND EXTERNALISM

also consider the explanatory styles used by these theories. While there may be a reductive relation between theories located at different levels, there is no reductive relation between theories using different explanatory styles.

This implies that the range of application of the reductionism framework should be restricted. Only when theories use the same explanatory style may there be a reductive relation between these theories. In addition, the reducing theory should have an explanatory advantage over the theory to be reduced.

Limiting, as I have suggested, the application of the reductionist framework and having a closer look at inter-theoretic relations will, I believe, only improve reductionism. As it is currently stated, it is in some cases simply question-begging. This is unfortunate. It is without doubt that theories sometimes reduce. Our understanding of these cases should not be blurred by incorporating the idea of reductive relations within such a presumptuous framework.

## Chapter 7

Reconsidering the dialectic of the reductionism debate

In the light of the discussion in the previous chapters, we can now see that Putnam's multiple realizability argument should not be taken as a mere ontological claim. Putnam's conclusion only follows given particular epistemological considerations. It is only given our explanatory needs that particular differences between psychological states belonging to the same type may be left out of consideration. It is only given our explanatory need to understand each other's behavior that psychological states can be said to be realized in different ways.

Finally, I argue that Bickle's fit or vanish approach should be replaced by a more liberal and less presumptuous account. Taking Bickle's new wave reductionism seriously, anti-reductionism has lost the battle before it has begun. The idea that there may be theories that do not fit some future scientific theory, but that are nevertheless worth preserving is simply not an option within Bickle's new wave reductionism. However, without a viable alternative to reductive relations, i.e. without there being the genuine possibility that there fails to be a reductive relation, reductionism is a presumptuous claim, very unlike our scientific practice.