

In Defence of Functionalism

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I

In ‘An Argument against Functionalism’ (Ben-Yami, 1999), Hanoch Ben-Yami attacks a brand of functionalism in the philosophy of mind championed by David Armstrong and David Lewis. According to this version of functionalism, a mental state can be defined as ‘a state that is *apt to be the cause of certain effects or apt to be the effect of certain causes*’ [(Armstrong, 1981), p. 20]. Or, the nature of a mental state can be characterised by its *causal role*:

Our view is that the concept of pain, or indeed of any other experience or mental state, is the concept of a state that occupies a certain causal role, a state with certain typical causes and effects. It is the concept of a state apt to being caused by certain stimuli and apt for causing certain behaviour. Or, better, of a state apt for being caused in certain ways by stimuli plus other mental states and apt for combining with certain other mental states to jointly cause certain behaviour. [(Lewis, 1983), p. 124]

Ben-Yami argues that this version of functionalism, sometimes called ‘causal functionalism’ [(Armstrong, 1999), p. 81], is false. He attempts to show that causal functionalism lacks the resources to answer the question why states with different causal links can be mental states of the same type. And this question is by no means a trivial one. Therefore, he concludes that causal functionalism is unjustified and untenable.

I will show that Ben-Yami’s argument is unsound. The challenge that he issues to causal functionalism is largely based on an inaccurate and incomplete understanding of the nature of functionalism. Once we have a clearer and more complete picture of the basis from which the alleged challenging question is raised, we will find that the question poses no real

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threat to functionalism. Causal functionalism is well-equipped to resolve the seeming question.

II

Ben-Yami's criticism of functionalism originates from his observation that the same type of mental state can cause behaviour and mental states of many types, and can be caused by events and mental states of many types:

For instance, I may close the window because I believe it is raining, in case I don't want water to get in; or I may open the window because I believe it is raining, if I know the awning will keep the water out and I like the smell of rain. If I believe it is raining I may come to think the farmers will complain, in case I also know there has already been too much rain this year; or I might come to think, for the same reason, that they will stop complaining, in case I know there hasn't been enough rain yet. I may come to believe it is because I hear the rain's sound; or because I see it falling through the closed windowpanes, without hearing its sound. And so on. [(Ben-Yami, 1999), p. 320]

The foregoing observation raises the following question:

Why are two states, which were caused by very different causes and in their turn caused very different mental states and behaviour, the same type of belief? One state was caused by the sound of rain and made the agent close the window and think the farmers will complain; another was caused by the sight of rain and made the agent open the window and think that the farmers will stop complaining: what do these states have in common that makes both of them the belief that it is raining? [(Ben-Yami, 1999), pp. 320–321]

Ben-Yami believes that this question has been overlooked by functionalists. Then he goes on to argue that functionalism even 'doesn't supply us with any reason why states with such different causal links are the same type of belief' [(Ben-Yami, 1999), p. 321].

The case Ben-Yami describes is credible. But his characterisations of the causal links are both distorted and misleading. The sound and the sight of rain are certainly the right stimuli that can cause the agent's belief that it is raining. But they are only *part* of the causes that generate the belief as the effect. If the agent had never known what raining is like, the sound and the sight of rain would not naturally cause him to believe that it is raining. If it is in a cold winter and the agent knows that it is very unlikely to rain in this season, the similar sound will also very unlikely cause the agent to believe that it is raining. So the stimuli must work with certain other mental states, which embody the agent's knowledge about raining, to cause the belief that it is raining.

Likewise, the belief that it is raining must work with certain other mental states to *jointly* cause other mental states and behaviour. If I did not have the *desire* to keep water out, I would not close the window even though I believe it is raining; I open the window not only because I *believe* it is raining, but also because I *know* the awning will keep the water out, and I *want* to smell the rain. If I believe it is raining I may come to think that the farmers will complain, because I also *know* there has already been too much rain this year and too much rain does no good for agriculture; or I might come to think that they will stop complaining because I *know* there hasn't been enough rain yet and insufficient rain also

does no good for agriculture. Normally, a certain type of mental state is seldom the effect of a *single* cause, nor does it in turn *sufficiently* cause other mental states or behaviour. Indeed, in the above example if all the other mental states were taken out from and only the belief that it is raining was left in the causal links, all the scenarios would become entirely unintelligible – for instance, merely citing the belief that it is raining can hardly explain the agent's behaviour of opening the window. Ben-Yami's puzzle about functionalism, namely, the issue why states with different causal links can be mental states of the same type, seems arising from his too narrow understanding of the nature of causal links between stimuli, mental states and behaviour, ignoring the requirement that the adequate causal analysis of a certain mental state usually implicates the consideration of some other mental states.

III

In virtue of what can two states with different causal links be classified as the same type, according to causal functionalism? Ben-Yami contends that functionalists cannot appeal to similarity in causal links as the condition of different states being the same type:

For instance, a person may close the window and think farmers will complain because he believes it is snowing. This person's state, which is the belief that it is snowing, has more causal links in common with the first state of our previous example, which was the belief that it is raining, than that latter state had with the second state of our previous example, which also was a belief that it is raining. [(Ben-Yami, 1999), p. 321]

This analysis is problematic in two respects. First, the causal links so described are incomplete. In the previous example, the agent's belief that it is raining is caused by the sound or the sight of rain *plus* the mental states that embody his knowledge of the conditions for rain being met. In the current example, the person's belief that it is snowing is caused by certain stimuli *plus* the mental states that embody his knowledge of the conditions for snow being met. Obviously, regarding the aspect of being caused, the two states of believing that it is raining have more causal links in common than each of them has with the state of believing that it is snowing. Second, functionalists can reply that the analysis of the causal role of a certain mental state should not be limited to *actual* causal links, but also need take *counterfactual* causal links into account. Two states of the same type may have more similarity in terms of counterfactual causal links. For example, two states of believing that it is raining may share the same counterfactual causal link to the behaviour of bringing an umbrella, whereas neither of them has a counterfactual causal link to the action of shoveling the snow on the car, as the state of believing that it is snowing does. Functionalists can maintain that what two states of the same type have in common is their actual *plus* counterfactual causal links.

IV

Ben-Yami disputes the functionalist's response that appeals to counterfactual causal links:

Suppose *A* and *B* are two tokens of the same type of belief. According to ... [the functionalist hypothesis], *A* and *B* have the same set of actual plus counterfactual causal links. To illustrate the problem with the view, let us consider the particular counterfactual situation in which *A* would change into a state *C* that has the same

actual causal links that *B* actually has. According to our hypothesis, *C*'s actual causal links would be different from those of *A*. Why, then, should we say that *C* would be the same token mental state as *A*, and not that *A* would change into a different mental state? It is surely possible to change one mental state into another by changing its causal links: why shouldn't that be the case with *A* and *C*? [(Ben-Yami, 1999), p. 321]

I can see no difficulty for functionalism to answer this question. Let us suppose that *A* is the belief that it is raining which has an actual causal link to the behaviour of closing the window. In a counterfactual situation that the agent had a desire to smell the rain, *A* would change into *C*, the belief that it is raining which has an actual causal link to the behaviour of opening the window. Likewise, for *C*, in a counterfactual situation that the agent had a desire to keep the water out, it would change into *A*, the belief that it is raining which has an actual causal link to the behaviour of closing the window. So *A* and *C* share the same set of actual plus counterfactual causal links. Therefore, according to the hypothesis, *A* and *C* are two tokens of the same type of belief. Of course, it is surely possible to change one mental state into another by changing its causal links. But still, whether or not two mental states with different causal links are the same type depends on their causal roles, namely, their typical causes and effects embodied in their actual plus counterfactual causal links.

V

The deep problem with functionalists, as Ben-Yami sees it, is 'the unqualified talk of states' in their definition of mental state:

When Lewis, for instance, writes that the concept of 'any mental state is the concept of a state that occupies a certain causal role,' he presupposes that the absolute identity of the relevant state as the same state in any situation is somehow given. All that is then left is to specify its causal role. However, once it is realised that one should also specify in what respect it is the same state, the problem surfaces. [(Ben-Yami, 1999), pp. 322–323]

I think causal functionalism has already provided a good solution, which is far from 'unexplainable and arbitrary,' to the problem of the classification and identification of states. According to causal functionalism, we characterise mental states as a group in terms of the whole system of causal interactions. The whole battery of mental states and their causal interactions characterised in this typical functionalist way consist in our informal, folk psychological theory. Then we can describe each type of mental state by way of its causal role in this network of states. As Lewis puts it:

[The concept of a certain mental state] is the concept of a member of a system of states that together more or less realise the pattern of causal generations set forth in common-sense psychology. (That system may be characterised as a whole and its members characterised afterward by reference to their place in it.) [(Lewis, 1983), pp. 124–125]

Types of mental states, then, can be construed as theoretical terms in commonsense psychology (Lewis, 1972). It is crucial to note that 'such package-deal concepts *apply together or not at all*' [(Armstrong, 1999), p. 84]. We can hardly specify any type of mental state in causal terms without referring to mental states of other types. Beliefs, for example, have characteristic causal connections with behaviour only given certain desires.

VI

To conclude, I have shown that Ben-Yami's attack on causal functionalism is untenable. The alleged challenging question arises from incomplete analyses of the causal links of the mental states under examination, which result in distorted characterisations of their causal roles. The understanding of the nature of causal functionalism is also inaccurate. Therefore, the argument based on this basis against functionalism is unfounded.

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