

## INTERNALISM AND SYNTAX

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The article criticizes the internalist approach to the philosophy of mind. First, it uses Popper's evolutionary grounded thought experiment, to claim that the study of intentional mental states should proceed by accounting for evidence from the surroundings of the organism. Then, the syntactic position in psychological research is presented as being compatible with internalism, as the view that research should be centered on the processes in the organism only. It is then argued that processes inside the organism crucially depend on external factors.

### I.

In the study of the philosophy of mind, syntactic approach seems to be predominant. Yet, upon closer inspection, an antiindividualistic grounds (Burge, 1984), it is able to reveal the dependence of the internal processes in the organism on the external ones, specifically their dependence on the surroundings of the organisms.

Popper has stressed the importance of the evolutionary factor in explaining knowledge. He recently (1987) proposed a thought experiment designed to show the importance of the organism's surroundings for its survival.

What I want to do is to accentuate the role of intentional mental states (IMS) for the survival of the organism, especially their connection to the surroundings, the ecological situation of the organism, this being taken filo- and ontogenetically.

Further, I wish to claim that the largely Popperian ecological stance might be used in opposing internalism, as based on the quite popular syntactic approach. I shall analyse an argument in this sense, against the claim that the processes which should be of interest for psychological research, are to be found inside the organism only, not in its surroundings.

At the end, I might say something against what the syntactic internalist theory (Fodor, 1987), has to say about solving the problem of the ecological, or causally grounded approach to the philosophy of mind.

## I.

*Thought experiment*

The thought experiment proposed by Popper is the following one: Suppose that we could produce a living substance in the retort? Is this substance — possibly a creature — in the grade to survive, even in we are capable of producing it? The answer is a straight-forward no, the reason for this being in the fact that a living being could not survive in the retort. Because, in order for the living organism to survive, appropriate surroundings for its survival should be present as well. And the retort does not provide for them. The claim on the ground of the thought experiment can be put in the following form:

(1) (Pr 1) (Popper, thought experiment)

The survival of organism  
O depends on the ap-  
propriate surroundings S.

This claim might be countered internalistically, in saying that it is not only on the appropriate surroundings that the survival of the organism O depends, but on the features internal to the organism. Even if the surroundings are appropriate, some organisms can not survive in them, the fault being their inappropriate internal organisation, and even in normal cases we can find such in some illnesses.

The answer to this might easily be found: In such a case we have an organism that is normally adapted to the surroundings. Yet, he is never adapted to all the features of the surroundings. Such features in his surroundings he is not adapted to are actually causes of his illness. Because, the illness of the organism is usually caused in some way by the features or entities in the surroundings of such an organism. So, when we claim that the organism is adapted to its surroundings, we do not mean by this, that he might be adapted to all the features in its surroundings, he is just generally well adapted to it. An individuum that would be completely adapted to the surrounding would survive forever. In this way he would not be an organism, but a deity.

There is a second clause jointed to this first premise, if we follow Popper further:

(Pr 1\*) Organism O has to dispose of knowledge K which matches the surroundings S.

This is a joint assertion to Premis 1. But it is substantial for the understanding of what Popper wants to say. He is not introducing evolutionary considerations for their own sake. What he really wants to

show is that for the survival of organism O, knowledge K is necessary. Further, it has to be some a priori knowledge which the organism brings along and which matches the constraint put by the world in which he lives.

To see more closely what is at stake, we have to change the example with the retort a little bit. Originally, if there is some man-produced form of life, and if this life is supposed to be produced in the retort, then presumably it is not a form of life as complex as humans can *dispose with*. Particularly, knowledge present in this form of life is not as complex as the humans would dispose with.

Yet, there is some continuity of knowledge, which is present in such life that is produced in the retort, and which is present in the organism that is able to live outside the retort. The continuity-changes match the changes in surroundings. If surroundings is simple, like the retort, it is possible for an organism such as an amoeba to survive in it. On the contrary, if the organism is as complex as a person, then obviously the surroundings of the retort would not suffice for that. Firstly, the perceptual mechanism on such an organism is much more complicated than of the more simple one. And, we can speak of the mental states of such a complex organism as the person, which has not been possible at all in the case of the more simple organisms.

Popper wants to say that the knowledge has to be a priori and that there has to be such a knowledge, if the organism is to survive in its environment.

This shows that he thinks of the human organism when he speaks about the organism which could be produced in the retort. And it goes without saying that such an organism could survive with difficulty in the retort. Thus, the surroundings of the organism, we can conclude, are very important for the development of different kinds of organisms.

And, further, we can claim that the complex surrounding for such an organism as the human organism demands more complex forms of knowledge, such as we find in the case of mental states (those mental states are not probable in the case of the amoeba).

This is thus a first point that shows how environment, the ecological niche, and mental states of some organism such as humans are mutually interdependent.

One more reason which proves the organism we are talking about to be a human organism, or person P, is the fact that it is not extremely probable that a wide a priori knowledge would be the one a paramecium, or even a dog or monkey has. So, in speaking about an organism, it is quite sure that one has to have the human organism in mind, which is capable of the most complex relations to its surroundings. And those complex relations enable him to have the (intentional) mental states.

It is thus not clear why the retort should be the relevant device for consideration about knowledge K of organism O. Because, if there has to be a wide a priori knowledge, an organism that is capable of living in the retort would not possess it. It is a fact that the human embryo is capable of living in the retort, to some point in its development. Yet, it is certain that up to the time he is still capable of living in the retort, the human embryo quite surely does not dispose of a priori knowledge.

Thus, if Popper is speaking about knowledge here, this knowledge K is almost surely the knowledge of an human organism, as far as it is a priori, and as far as it has, as such, some connections with the surroundings S of the organism. But, in this case, the organism has to dispose of the complex surroundings S to be able to develop such a large body of knowledge. And, if he disposes with such a rich environment (surroundings S), then it is not wrong to say that there has to be some mechanism where such knowledge K is stored.

The place where we can presume that such knowledge K of organism O is stored, where the relation of the organism O to the environment is very complex, thus where the organism lives in a complex environment (surroundings S), are the organism's mental states (MS).

Futhermore, as we have here to do with mental states equipped with some content, the content being presumably linked with the environment of the organism O, we can presume that those are intentional mental states (IMS).

From here, one can easily see that intentional mental states have probably something to do with the environment of the organism O and that according to the present opinion here they are ecologically bound.

The following premise can be introduced on the ground of what has been already hoid.

(Pr 2\*) The knowledge K of human organism P is stored in its IMS's (Intentional Mental States).

The knowledge K that is appropriate for the surroundings S the thought experiment speaks about is thus the knowledge of human organism. This is the first point which we can establish. We can speak about a priori wide knowledge only in such a case.

But we can speak of such knowledge only in so far as there exist rich enough surroundings S the organism is able and has to react to. It is able to react to a rich enough environment, not to the one the paramecia can react to. Paramecia presumably reacts exclusively to the light or to the darkness, and to such features like the Earth's magnetism. Whereas some one like a higher vertebrate or a human reacts to a much more differentiated world in which it can individuate different entities, as for example middle-sized objects.

Knowledge of the human organism, by its difference to the organism of the higher vertebrates, is not directed to objects exclusively. In addition, it is directed to abstract relations as well, among other things, which hold among those objects.

We started with the claim, as put forward by Popper in his recent thought-experiment, that the organism's O's survival depends on its environment.

We have seen that the environment of the organism O has to be complex. Some organisms in the environment dispose with great amounts of knowledge. And such organisms could not survive in the surroundings where there are not enough stimuli for them. This holds especially for organisms like humans. Those organisms dispose of rich knowledge and develop it only if the surroundings S are rich enough. This means, as we said, that such a kind of organisms, like persons, have a very rich knowledge, and at the same time it means that such a knowledge is directed at the world, at the surroundings S where the organisms can be found. For organisms such as persons, this knowledge is stored in intentional mental states. Those states are maybe distinguished by the fact that they are capable of even being directed at some abstract relations and at universals. This is, very roughly, the meaning of the term knowledge as put forward in the thought experiment by Popper. Qualitatively, the form of the knowledge he is interested in, is very different from the level of the physical. Yet, the most important claim at this very point is that nevertheless, the surroundings contribute decisively to the knowledge of the organism O, even in the case of man.

Knowledge is important in matching the organism with the environment. The most interesting forms of knowledge are those matching a complex array of stimuli in the environment to the organism O. Such is surely the typical case for the humans.

Secondly, I take that what is interesting in the case of the study of such organisms as humans, and what distinguishes them from other organisms, are their mental states.

It is a fact that mental states are mostly studied nowadays as to their syntactical features.

Now, no one would deny that there are syntactical features in the study of the human mind and mental states. Yet, it seems that those syntactical features have been accentuated too much.

The time has come to accentuate the surroundings of the organism, even for the study of such features like mental states.

First, it seems plausible enough to claim that mental states and their syntactic features, in as far as they exist, are being made in response to the environment of the organism, in response to its surroundings.

Secondly, still more important, the intentionality of mental states surely has to do with the ecological environment where the organism O has to fulfill his task of survival.

It might be that many of the difficulties connected to the concept of intentionality are there mostly because of improper or insufficient syntactical treatment of those intentional mental states.

It seems to me that some reflections over the Popperian thought-experiment, connected to evolutionary theory, can bring our thinking in this direction.

I think that to follow it requires that, among other things, one is able to cope with the problem of syntactical treatment of the human mind, especially the treatment of intentional mental states (IMS) of such an organism as man.

I shall oppose the syntactical treatment of mind, after first exposing it.

Especially I would like to claim the following, which I take to be the conclusion form the preceding premises in the Popperian manner:

(Concl.) The study of IMS (intentional mental states) should proceed by accounting for evidence from surroundings S of the organism O (person P).

This ecological and externalist conclusion seems to me to deliver an appropriate starting point for a criticism of the syntactical theory of mind, especially the intentional mental states.

I shall now turn towards the presentation of the syntactic theory of mind, criticizing it later.

## II.

### *Syntactic theory of mind*

Syntactic theory of mind (STM) starts with the observation that syntactical connections in the mind are most important for the study of the mind. The claim can be put in the following form:

(Pr 1) For the study of IMS of the organism (person) O, the *connections* in O among the mental states  $MS_1, \dots, MS_n$  are important.

One part of this claim is directed to the organism O, and this organism is interpreted as a person here. This is plausible, because it is least difficult to ascribe mental states of the quality we are interested in to the other kinds of organisms.

The following fact seems to be that, since we have to do with an organism like the human, we have to do with a quite intertwined array of mental states, whatever they might be. The important fact is that mental states are many, and that they are mutually interrelated.

But, on this stage, it is not only mental states which become important. The *connections* between them are important, not they by themselves.

That is why it seems right to claim that the connections are what is really important for the study of intentional mental states (IMS).

From here it follows that

(Pr 2) In studying psychical reality of O, the formal syntactical constraints (in determining IMS) are important.

And there is a joint claim to the previous one:

(Pr' 2) The IMS's are individuated by the syntactic means: the intentionality is to be accounted for by the syntax.

If it is true that connections are important in studying the mind of the organism O, then it seems to be right to generalize this claim. And this is what (Pr 2) is doing. It says that for the study of psychical reality of organism O, the formal syntactical constraints are important. Especially, the formal syntactical constraints are important in determining the IMS's, intentional mental states themselves.

The joint claim (Pr' 2) states this even more clearly. It says that IMS, intentional mental states, are individuated by syntactic means. And thus the intentionality itself has to be accounted for by the syntax.

If we take an intentional state, such as thought about an apple, in our case the apple, or the relation to the apple would not be important. What would be important is just the syntactical means of individuation of something, existing or unexisting, like the apple.

From this claim especially, it should be clear that intentionality is being understood here as an individualistic, solipsistic kind of intentionality. It would not matter, for example, whether the apple is really there or not, or if the apple, if it is there, is made out of one or of another completely different kind of substance, or that the water is ordinary water or water with a completely different chemical structure, unbeknown to the subject.

The following claim goes further in the direction of individualism or solipsism, which has been but mentioned previously. It says:

(in-between) Formal syntactical constraints are to be found inside the organism only

It seems to be clear that constraints on formality, which determine intentional mental states, and which are the only features that determine their intentionality, are to be found inside the organism only. For example, there might be water around, one might argue, but this water has nothing to do with the intentional mental states of some organism O, if there is no organism O present. But even if there

is an organism *O* present, there have to be processes inside him that enable him to perceive the outer reality and to form the contents of mental states connected to it. But, it further goes, in this case it is clear that it is not the object or states represented that count; what really counts are things that go on in the organism *O* itself. And the constraints are syntactical constraints. Only with the help of syntactical constraints that go on inside the organism, is it thus possible to even assess some content. But this means that the content of mental states, for example, does not really depend on features other than the syntactical constraints that go on inside the organism.

From here, we can take the following step, generalizing the claim of syntactic individuation of the IMS to the claim of internalism:

- (C) Processes, interesting for psychological research, are the ones we find *inside* organism *O*, not in its surroundings *S*.

This claim seems to be grounded, if there are connections inside the organism which are important for the study of intentional mental states. Further, it is grounded if those connections are features that put constraints on individuation of intentional mental states by syntactic means. And thus it seems to be in order to claim that internalism is right if there exist such powerful syntactical constraints, that give such an importance to the insides of the organisms.

### III.

#### *Criticism of the syntactic theory of mind*

It seems thus that syntactically founded internalism in the philosophy of mind, concerning explanation of intentional mental states, is on the right way.

Yet, it seems that such an approach, such an internalist conclusion, loses its appeal when considered more closely.

It might be shown that such a doctrine overstates the importance of syntactical connections inside the organism, and further interprets them internalistically.

It seems to me that the internalist conclusion is ill grounded. A full extension of the story, when looked at from closer, is tightly connected to externalist considerations.

One of the main intuitions here would be that we can not individuate features of syntacticity or internalism without taking into account the surroundings *S* of the organism we are dealing with. Especially, we are not able to individuate Intentional Mental States and their function, without such externalist considerations.

But let me take those theses separately, delivering some of the reasons contrary to the exposed syntactical theory of mind.

First let me look at the (Pr 1), which says that connections in organism between several MS are important for the study of the IMS.

This would be the opposing intuition:

(Pr 1) If one would study exclusively (or mostly) the connections among mental states  $MS_1, \dots, MS_n$  in studying the IMS of the person  $O$ ,

- one would not be able to study connections among MS's, since there would not be any possibility of identification of MS's for
- we have the possibility of identification of MS only if we know what the *intentional* MS's are about.

It is clear that the dispute here concerns an understanding of Intentionality: whether we should understand it internalistically or externalistically. The claim here is that intentionality of mental states is to be understood externalistically. This would mean that in *typical* cases, intentional directedness is directedness towards external entities. The justification for this claim can be evolutionary: the organism  $O$  whose intentionality would not be directed toward the outer external world of entities and processes in the most typical cases, would not have much chance to survive. This still does not mean that there would not be any possibility for the illusions and other intentional features that show the prevailing force of some internal happenings of the organism. But, a typical case of intentionality would still be externalist. Even illusions have their grounds in typical cases. Because, if I am hallucinating a castle, I am hallucinating it on the grounds of the existing castles or on the grounds of the pictures of these castles, which are themselves grounded in some existing models.

But the (Pr 1) says more. It says that it would not even be possible to individuate, to identify mental states, if there would be no typical directedness of those IMS to the outer external reality. And because of that, it would not be possible to study the connections among mental states either, because there would be no entities (IMS's) identified such that connections would apply among them.

The second claim in the reasoning in favor of STM has been that syntactical constraints are important in studying psychical reality of the organism  $O$ , and particularly the claim goes that the very intentionality of MS is introduced by syntactic means.

Here, the opposing claim:

(Pr 2) For typical psychological research, *intentional* external MS's are important.

(Pr 2') The intentional MS can not be individuated but by their links to the environment of the organism O they are the IMS's of.

Thus firstly, for typical psychological research, we really have to have intentionality. But the only plausible way to introduce intentionality is to explain the IMS as something that responds to the external surroundings of the organisms.

This claim might be countered by saying that psychology is interested in explaining the general form of intentional mental states.

But here, the answer is clear: The general form of intentionality has still to preserve the directedness of intentional mental states. Thus, it is true that the general form of intentionality would have nothing to do with particulars like apples, people, goodnesses. But nevertheless, the intentional structure has to be such as to expose the directedness. Thus, what is important for intentionality is the directedness of IMS's. There might really not be any apple necessary to fulfill them. But it is vitally important that there has to be some kind of entity, real or abstract, that would satisfy the demands of intentionality, of the intentional directedness. But those entities the IMS are directed at are typically ecological entities in the environment of the organism O disposing of IMS's.

Thus, it is false to claim that the individuation of the IMS can be affected by syntactical constraints exclusively, and thus that intentionality might be accounted for by the syntax.

The next claim of the STM is that the formal syntactical constraints are to be found inside the organisms only.

Here, the opposing claim would be:

(in-between) Formal constraints are to be found in the environment of the organism — the organism is only working through them.

It is thus not true that formal constraints reside only in the internalist syntactic structure of the organism's mind.

To what a extent this claim is false is best shown by the existence of ecologically-oriented projects of explanation of perception, like Gibson's. Such a project starts with invariants, thus with formal constraints that are to be found in the surroundings of the Organism. The perceptual apparatus of O works only because it is adapted to those ecological constraints. The Organism's perceptual apparatus, thus, is only picking up what's around there.

Thus, it is not true that formal constraints are to be found in the organism only. The most one can claim is that the insides of the organism are adapted, that they match the external environment.

Lastly, we had promoted by the STM an internalist claim how processes, interesting for psychological research; are just the ones we can find inside the organisms only, not in their surroundings.

The opposing claim, which has started to take shape already, can be put like that:

- (C) Processes inside organism O depend on the external surroundings S (of the organism O).

This means, that the internalist conclusion is not grounded. There might and there really do exist interesting connections in the insides of organisms, building the structure of their minds. Yet, those mechanisms, which can be accounted for syntactically, can not be conceived without an understanding of the vital importance of the organism's surroundings. If we study some mental state IMS of an organism, particularly, we need to take into account how this state developed out of the situation of this organism in its environment, surroundings S.

And it is a fact that psychology as a discipline has constantly explain the ecological situation of the organism, although, at some useul levels of analysis, the syntactical or internalist point of view might be welcome.

I take it the merit of Poppers thought experimentis to show us the importance of this ecological, externalist factor, which we can introduce so justly on evolutionary grounds or considerations.

#### *References:*

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*Matjaž Potrč*: INTERNALIZAM I SINTAKSA

## Sažetak

Članak kritizira internalistički pristup u filozofiji duha. On prvo upotrebljava Popperov evolucijski utemeljeni misaoni eksperiment kako bi ukazao na to da proučavanje intencionalnih mentalnih stanja treba početi time da se položi računa o dokaznom materijalu iz okoline organizma. Zatim prezentira sintaktičko stajalište u psihološkom istraživanju kao kompatibilno s internalizmom — nazorom da se istraživanje treba isključivo usredrediti na procese unutar organizma. Zatim se tvrdi da ti procesi u organizmu ključno zavise od vanjskih faktora.