Matjaž Potrč: Resultance Identity

The theory of identity emerged with Place’s version of type-identity theory. Its type-type identity form was driven by the belief that the appropriate patterns to account for identity relation are generalist. The less noticed feature of Place’s theory is that the identity claim was never extended to cover propositional contents, but that it stayed with the identity involving process in the brain and consciousness. Resultance schema, reconstructed from moral theory, gives the following parallel result for the case of Place’s identity theory. Thick properties of conscious processes result upon physical properties of the brain. The unique patterns of these thick properties then actually constitute thin property of the conscious process. Such resultance or emergence based consciousness rests upon unique patterns and it is in accordance with the particularist founding.

The Moral Case of Resultance
Resultance is the founding relation proposed by a particularist. We are interested in what underpins the constitution of moral properties. There is the generalist story featuring supervenience. It claims that goodness, say, is a moral property that is underpinned by some non-moral properties. Moral property of goodness however cannot be accounted just by its emerging upon the basis of non-moral properties. According to the supervenient account there has to be a generalist pattern underlying the relation. Not just that this man is morally good because of the non-moral and ultimately physical arrangement that underpins the property of goodness. We would not even have the idea of the property of goodness would it not be for some general pattern securing the relation. The man is good not just in the case where the property of goodness emerges. He is good just in case where in each circumstances of non-moral kind just like these there would have to exist the moral property of goodness.¹ ²

¹ Horgan ad Timmons, with their Moral Twin Earth thought experiments, have argued that this will not do for the case of morality. The claim would be that general patterns of this kind and intuitions related to these are not relevant for the area of morality, whereas they may well be relevant for the cases of non-moral supervenient properties, such as water being identical to H2O. The thought experiment transposes us to the Twin Earth where the explicitly available properties of water, such as being transparent, flowing in rivers and filling seas are exactly like those on our home Earth. But the hidden essential properties of twin water, twater on Twin Earth, are of a quite different nature, namely that of a complicated chemical substance whose structure for the sake of simplicity we abbreviate as that of XYZ. The intuition we have about the stuff on the Twin Earth is that this is no water, but actually quite a different kind of substance, namely twater. This is related to the fact that water supervenes upon the chemical structure of H2O, i.e. in each case where there would be chemical underlying property H2O around, there would be water. If the general pattern of there being H2O structure underlying property of water is not satisfied, then we will have the intuition that there is no water around, but some chemically quite different stuff, twater, whose appearance is the same, and whose structure is XYZ. In the case of moral properties such as good, a parallel intuition is not forthcoming. If the underlying moral properties on the Moral Twin Earth are consequentialist, whereas those on our earth are deontological, we would still have the intuition that the resulting property of goodness is there. The idea is that this is due to the possibility that there is no universally valid general pattern projecting the necessity of some kind of underlying structure to result in a certain moral property, such as goodness. There may be several variations in the subvenient non-moral basis for a moral property. If this approach is pushed a little bit further, it may turn out that there will be no general pattern underlying a certain moral property. At the limit, we will encounter the possibility of

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According to the particularist there is no need for the generalist pattern such as the one introduced by supervenient relation in order for a certain property to come about or to be explained. Properties of higher order, such as moral properties, directly result from lower order or from non-moral properties, in the case discussed.

One intuition behind the particularist interpretation of the grounding relation is richness. There is a rich and holistic background to the backed up property. The intractable nature of the grounding background retains causal power, so that we do not have to do with epiphenomenalism. The grounding relation in question is emergence. The basis of emergence in this respect is richness and holism in the support of a certain property.\(^3\) Because of this, the property F in question has to be accounted for – as an emergent property – and not explained in a generalist manner.

There is explanation of some sort in emergentism, although not a generalist motivated sort. The explanation is that just and exactly \(this\) underlying structure produces that kind of property. So there is an indexical element. The idea with the emergence is that there is no general pattern involved into it. The emergent property arises upon a structure, but this is a unique structure. Emergence, in this respect, is tied to the unique unrepeatable patterns. Accordingly, each case of emergent property is unique. But it is also to be noted that relevance is basic for the specific and case grounded relation. Emergentism thus brings relevance of particular patterns.

Let us take some examples of the resultant or of emergent properties. We will see that a specific pattern or structure will be grounding for these. Without this structure, there would not exist the property in question. Whatever results from the grounding natural basis of property is not directly this property, but this property’s underlying properties. The final property is constituted by these underlying properties, which themselves result from the naturalistically respectable properties. The entire relation involving both resultant and constituency may as well be called emergent grounding relation. It acknowledges causal underpinning of the resultant underlying properties whose pattern constitutes the final property. So there are two levels at which properties appear in a grounding relation. The first case would be the property of the

\(^2\) An argument would need to be construed here to the effect that Moral Twin Earth experiments support emergentist account of grounding relation.

\(^3\) Supervenience fan may declare herself to be happy with this. It is not tractability of the background that matters, she will claim, but – no matter what would be the background’s richness – the counterfactual lawful generalist pattern bringing the projected repetition of the original case. Only this repetition will secure explanation of the property in question. Why does an x have the property F? Because each x with the same grounding basis would have property F. The particularist will reply that the – counterfactual – repetition of a certain background arrangement (physical arrangement as the background of the property F) will not be more powerful to explain the coming into existence of F as is the original background arrangement to F. Tractability that the generalist needs will not be solved by the projection of the primary basis. The thing that matters is whether the background basis in question itself is tractable. Usually it will not be, because of the rich and complex structure of the world. So the grounding relation to be embraced is emergence or resultant. The property F of x results from the appropriate background.

It is interesting that resultant or emergence was introduced by Jonathan Dancy in discussion of causality. The idea must have been that there is this rich intractable holistic background to a certain effect. The cause of an effect does not allow for a simple explanation because of its complex and intractable structure. So the coming into existence of F has to be emergent. The counterfactual repeatable projection of the basis in question does not follow either. The generalist supervenient pattern will not do the work of explanation that has to be performed at the first step. But the first step – because of the richness of the world at several levels – will not allow for generalist explanation, it will be emergent.
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table. This is the property constituted by properties of there being four legs, a plate, a certain arrangement of these. The properties of there being legs are much more profiled if compared to the property of the table. They have more content, as table may be constituted from several different shapes of table legs. These legs have more content in respect to the table and this is why we call them thick property in respect to the table that would then be a thin property. Dangerous cliff is another thin property that may be constituted from the thick and thus comparatively more contentfull properties of there being a slippery surface and steepness involved. Consider that the specific shape in which steepness and slippery surface – beside to other relevant factors – come together constitute the dangerousness of this cliff.

We can now come back to the moral case of resultance that may be illustrated by the following schema:

\[
\begin{array}{c}
O \rightarrow 0 \rightarrow O \\
\text{constituency thinn moral property (good)}
\end{array}
\]

\[
\begin{array}{c}
-0-O \rightarrow o - \\
\text{thick moral properties (humble, helping)}
\end{array}
\]

\[
\uparrow \text{resultance}
\]

natural properties

There are natural properties, which may be spelled out in physical terms. Thick moral properties such as being humble and helping somebody in need result from these. Consider that each of these properties may be a result of a branching tree of underlying constitutive properties that ultimately touch the natural base. There are for example many different instantiating ways of helping somebody that are themselves realized by other underlying properties. However, thick moral properties need to come in a certain specific shape, which allows them to constitute thin moral property of being good. This would be a case of moral resultance. Now although there is the relation of constituency between thick properties and the thin property, the whole construal may be called resultance. For thin property ultimately results from natural properties. But resultance also involves an important contribution of shape in which thick moral properties come as embedded, that ultimately constitutes thin moral property of goodness. Resultance thus inherently comprises a unique pattern. The constituent thin properties however allow for such a rich variability that it would be rather difficult to have any viable general pattern covering all the cases how the resultant thin moral property of goodness would come about. There is a unique pattern for ach case. But the specific shape makes this pattern relevant. This is the schema of resultance or emergence as applied to the moral case.

**Mind-Body Case of Resultance**

Let us turn now to the mind-body case of resultance. The appropriately arranged schema for the thin mental property of the cat thought with its underlying thin mental properties of having four legs, milk-eating would look like that:

\[
\begin{array}{c}
O \rightarrow 0 \rightarrow O \\
\text{constituency thin mental property (thought involving a cat)}
\end{array}
\]
-0-O – o -     -----→
thick mental properties
(four legs, milk-eating)

↑ resultance

natural properties

The thin mental property of a thought directed at the cat is constituted from several thick properties and from their arrangement, from the specific shape in which they come. This shape is indicated by the graphic arrangement figuring above the assemblage of thick properties. In a way, thick mental properties consist of several branching additional properties (the property of having four legs comes in different physical or natural instantiations), and there is arrangement of the shape of these thick properties, the way they come together, that constitutes the resulting thin mental property of a thought directed at the cat.

What are lessons of application of the resultance schema to the mind-body problem, and what is the mind-body problem, first? Mind-body problem asks how it is possible to relate two substances in question. The above schema of resultance provides an answer to this, by proposing natural properties to ground mental properties, by the help of an appropriate arrangement of thick mental properties.

From the above schema we see that the resultance relation involving mental properties in need of explanation is not exercised directly upon natural properties, but in a branching manner upon several intertwined concepts and properties that result in thick mental properties.

Further, thick mental properties and their unique particular shape constitute the thin mental property of a cat-thought, in our case. This is to say that the relation from the natural to the mental properties is not a direct one. Mental occurrence (such as thin property of cat thought) is constituted by a rich arrangement of thick properties and of their shape.

Consciousness is a Process in the Brain
The first one to have proposed identity thesis as a solution to the mind-body problem was U.T. Place. His suggestion was that consciousness is a process in the brain (1956).

U.T. Place’s answer was that wherever you encounter an example of conscious process, this one would be identical to some brain process. In other words, if there is some conscious process that somebody has this cannot happen without it being the case that some process in the brain would happen as well. We are actually talking about type-type identity theory: take any type of conscious process, it will turn out to be identical to some type of process in the brain. This is obviously a generalist strategy. The thesis is formulated in a universally quantified form. It also relates general mental or conscious types to the general bodily or physical types. So whatever a conscious process may be, its type will be identical to a certain type of the process in the brain. One advantage of such a formulation is that in the area of mind-body relations we are up to obtain scientifically respectable generalizations, comparable to the empirical discoveries that water is identical to H2O, which means that, any empirical type of appearance of water you take, it will be identical, according to this thesis, to some type of chemical structure.
that may be specified as H$_2$O. Scientific discoveries are thus up to establishing the theses about the identity of types of processes involved. Such identity theses do then confirm their generalist reach by being in value as scientifically respectable generalities or laws. Type-type identity theses were later opposed by token-token identity theories, which committed them to far less, just to the identity between tokens of mental events with the tokens of physical events. Notice that in this manner, the functional thesis of identity realization in several types of stuff could have been proposed, denying thereby the commitment of a special type of physical realization, in the human brain. Notice as well that token-token identity thesis proposal as a solution to the mind-body problem is committed to a kind of atomism that was strange to Place’s proposal. He talks about the processes, namely about the conscious processes and about the processes in the brain. Whereas token-token identity theorist embraces atomistic thesis. The difference is that processes do not get committed to any ontologically atomistic and possibly well-delineated chunks, such as events.4

Back to consciousness.
The identity theory of U.T. Place as an answer to the mind-body problem is often criticized for its commitment to the type-identity theory, and token-token proposal of functionalist kind are thereby presupposed as being a better solution. Place’s identity thesis was proposed for consciousness, and for conscious processes exclusively. It was not up to extend its reach to the mental states, such as the cat related thought that we discussed earlier. This is understandable because of the nature of the consciousness. Whatever consciousness it is, it certainly seems implausible to argue for the existence of atomistic conscious states or events. This would be opposed to the very nature of consciousness, which seems to be first of all a process. And actually Place never extended his identity theory to cover atomistic posits appearing in the area of higher cognition, such as thoughts and representations. This move was effectuated by others however, such as by Armstrong, which extended the domain of identity thesis to cover propositional contents. Thus Armstrong would be able to discuss the grounding relation for the cat thought, whereas Place simply was not committed to that move that would put him into an embrace of supposition of the existence of atomistic posits appearing in higher cognition, such as thoughts, thought contents and propositional attitudes. In Maribor, Place attacked Davidson’s token-token identity thesis as defending a piece of dogmatism. One manner to understand this accusation, which Place explicitly embraced, was that token-token identity thesis is dogmatic because of not being scientifically minded. This then first of all means that type identity statements, such as “water = H$_2$O”, are much more adapted to scientifically respectable general laws (such identity statement is a generally quantified lawful statement), which allow for empirical confirmation and disconfirmation (the water type identity statement in question was discovered and accepted as a scientific conjecture one day, and it may happen that under the burden of additional empirical discoveries it would be shown as false). The token-token identity theory is dogmatic in this respect, because it is just an a priori piece of reasoning, not provable or to be able to be disconfirmed by any empirical discovery. If it is a general kind of thesis, then this generality is related to its a priori form, as an extension over a multitude of possible worlds, say. But it is questionable even if token-token identity thesis would be appropriate for such a kind of generality induced cross-

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4 Terry Horgan once argued in a paper against the plausibility of existence concerning these atomistic events.
world extension, because it’s a priori commitment is just to the general thesis that in each case, if there is a token of mental event, this token has to be identical with some token of physical event.

Now another and as to my understanding much more serious objection to Davidson style token-token identity theory can come from its commitment to atomism. Very simply, tokens are not processes. While the mind-body identity thesis may be extended to cover an atomistic construal, and in fact it was so extended by Armstrong and Davidson among others, this was not Place’s original intention. Token-token identity theory will basically not account for processes, and in the case it may account for processes, it will try to do so by presenting processes as separate atomistic chunks, of the actually or functionally well-delineated nature. But this just cannot correspond to the nature of consciousness for which the original Place’s identity thesis was construed. His refusal to adopt token-token identity thesis will then be related to the essentially processual and not chunkable nature of conscious processes.

Resultant particular patterns
Whatever consciousness is, it is closer to a process than to an atomistic chunk. Consciousness is of a rich and holistic qualitative nature. Another characteristics of consciousness seem to be that it brings relevance with it. It is because of this qualitative conscious feel that I like this picture, and again because of another qualitative conscious feel that I like that food. It seems that conscious processes are tied to patterns and that these patterns are bringing relevance with them. This relevance is important, although it does not necessarily need to be noticed in this quality. There is a qualitative feeling that I am sitting in an upwards position upon my chair, and this just feels right, although I usually do not notice it. This feeling certainly is relevant for my overall behavior, although it does get rarely thematized. It would get so thematized perhaps in the case I would position myself with my head down and my feet up while doing some exercise in the gym. There are innumerable qualitative or conscious feelings of this kind that accompany me at each moment. For example, there is also the qualitative feeling resulting from myself being hungry or of having too high cholesterol level, although such feeling may go on for quite a while without being explicitly noticed and thematized. Even harder are noticed and thematized such qualitative feelings that go on in the case of the normal and unexceptional. Most often, I do not even notice when my cholesterol level is low or appropriate, perhaps I just in some cases do thematise it as myself feeling good today, although a conscious process is in the background of it. In all these cases, some holistic and intricate particularist patterns seem to underlie conscious processes. Because of this richness these qualitative conscious patterns are rarely thematized, or translated into an atomistically appropriate propositional chunking talk.

The feeling is as well that such patterns, because of their holistic nature, are closer to an emergentist than to a supervenience based account. The difference is in that the supervenience based account is appropriate to generalistically expandable patterns, which need to handle basic atomistic facts. At least supervenience thesis will be inclined
into the well-delineated chunk buying direction.\(^5\) Emergentist or resultance thesis, to the contrary, will be happy with particular patterns.\(^6\)

We may now look at how all this may work for the original Place’s *consciousness is a process in the brain* thesis, applied to the *resultance* schema as it was introduced earlier for the moral and mental posits\(^7\) case. The main idea here would be that the *resultant unique structure* should be substituted for the simplistic and therefore misguided token-token identity thesis.

\[
\begin{align*}
\text{O} & \rightarrow \text{O} & \text{thin mental property (consciousness)} \\
\text{-O-O-} & \text{-o-} & \text{thick conscious properties \ (processes in the brain)} \\
& & \text{(not well delineated ingredients of qualitative feelings, illumination, upright position feel)} \\
\uparrow & \text{resultance} \\
& \text{natural properties}
\end{align*}
\]

According to this schema, we have natural properties of physical activity in the brain at the bottom. These natural properties produce as their result thick conscious properties, i.e. “ingredients” (not well delineated because of their richness). Examples of these would figure noticing of a specific pitch of illumination during the visual process elaboration and upright position feel in my body movement activity. It has to be stressed that each of such now described thick conscious properties (thick, because they are spatio-temporally located in respect to the experiential space-time positioning of the body, and therefore in this respect they have a profiled specific content, although a content the access to which is of subliminal nature) is just our proposition chunking minded abstraction from the rich intricate process basis of the whole pattern underlying the constitution of the resulting conscious process. The property of the conscious process is the qualitative or what-it’s-like feeling that results from, emerges upon, or is constituted by the unique pattern of underlying thick properties. Consciousness itself or conscious process is a thin property in the discussed case. Thick properties together with the specific arrangement of their *shape* actually constitute the thin qualitative feeling, what-it’s-like or property of consciousness.

Now one may claim that there are two basic levels of emerging properties here, and that there is an intermediary level that is doing most of the job, that of thick properties. If we look at the schema, we can see that the relation dubbed resultance, namely the relation leading from natural properties to thick properties would itself need an explanation. The explanatory gap will persist at this point, we may feel, because here is the relation between the physical properties and between the first level of mental properties. I can just say that there is this problem here indeed and that it is not my

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\(^5\) Supervenience friend can also proceed with intractable subvenient basis. Then she will have to *repeat* this basis over all possible cases falling under a general pattern. Why?

\(^6\) It will allow particular patterns to *causally* found resultant property, in counter distinction to epiphenomenalism.

\(^7\) Thoughts, in the example previously given. By the way, the terms posit certainly deserves a separate metaphysical evaluation.
intention to solve it. On the other hand, it seems appropriate to mention that there is no basic difference between thick mental properties and between thin mental property. The reason is very simple: relation of constitution between thick and mental properties seems to be the relation of identity. In other words: the property of conscious process as a thin mental property is identical to the pattern of thick properties constituting it. As there is a big variability and richness of the underlying thick properties, their pattern will possibly vary substantially from one case to another one. But there will still be the product of a specific qualitative feeling or of a specific conscious process as the resulting thin property.

Taking now over the original Place’s mind-body identity claim that consciousness is a process in the brain, we may conclude the following:

• Process in the brain results from natural properties. If this is the case, referring to the schema above, we can see that a pattern of the thick properties conscious activity is what results from natural or physical underlying properties. This would at least offer a trial to solve mind-body problem in the case the identity between the physical natural property bases is affirmed. Although it is doubtful that the mind-body problem is really solved by this means. At least the causal interaction or identity between the physical and conscious level is affirmed, without that an explanation would necessarily be forthcoming, as the explanation would require general patterns. But the intertwined pattern of thick properties rather invites an emergentist or resultant account of the grounding relation.

• Also, it may be said that consciousness as process in the brain, consciousness as the thin property that is constituted from a pattern of thick conscious properties ultimately results from the process in the brain. How comes, do we not have an intermediary level here that is efficient, namely the level of thick conscious properties? The answer is that this does not need to be the case. The schema shows that the pattern of thick properties involved simply is the thin property of conscious process. So there is not really any intermediary here. The constitution of the thin property of conscious process involves resultance. A particular pattern of thick conscious properties is identical to this conscious process.

According to the now presented schema, U.T. Place’s theory is involved with conscious processes and with particular patterns that are identical to them, and that are again identical to the physical underlying properties enabling them.

There seems to be a tension in U.T. Place’s work however if this is the case, in respect of the nature of the patterns involved:

- According to Place’s type-type identity theory, the belief that general explanatory patterns are involved would be of relevance.
- In tension with the above, the defending of rich intertwined patterns of properties that are conscious and that produce what-it’s-like qualitative feelings, seem to be particularist.
- But the real important thing is the structure of resultance – how consciousness results from processes in the brain.

Perhaps the main task of the above remarks would be as follows. The impression should be improved according to which U.T. Place’s original identity thesis, in the basis of the
discussion involving the mind-body problem, is just a generalist undertaking because it is the type-type kind of identity theory.

Taken into account that there is the structure of resultance, or the complex pattern involved into the phenomenon (pattern of thick properties or processes in the brain constituting conscious process) the picture should be put into question according to which there is just the simplistic kind of identity that matters. Contrary to such a presumption, resultance would give an appropriate – emergentist – picture of identity relation, whose basis is complex and holistic, founded upon various descriptive levels and upon the relevant particular pattern from which the conscious process results or emerges. As the general task to affirm the very plausibility and existence of particular patterns, as against ubiquitous presence of general patterns, is far from accomplished, it is profitable and interesting to look from this particularist patterns (thick properties) angle at Place’s identity thesis.

One could try to understand relations presented in the schema as involving just levels at which several grains and qualities of elements appear. It seems that as against this, the original Place’s consciousness-is-a-process-in-the-brain thesis affirms a much more interesting relation of resultance, involving patterns of thick properties. Thick properties involved into conscious processes are inappropriate for an atomist kind of treatment because if they would be such elements, their valence would be able to change, because of the overall structure of unique patterns into which these thick properties appear. The general idea would then be that there is a substantial contribution of unique beautiful particularist patterns because of which their valence changes. Valence though is comparatively easily determined for the moral case (cruelty seems to have negative valence). Whereas the contributory role of thick conscious property elements would be different, and it would only be accounted for in terms of belonging or not belonging to a certain kind of qualitative experience.

References