Does critical realism need the concept of three domains of reality? A Roundtable

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Does critical realism need the concept of three domains of reality? A Roundtable

The concept of the three domains of reality is widely used in empirical critical realist research. However, there has been little scrutiny of how the domains are conceptualized and what they contribute to critical realism. This paper involves four arguments. First, Tom Fryer and Cristián Navarrete argue that the three domains of reality are redundant, confusing, and unsupported by Bhaskar's theorizing. Second, Dave Elder-Vass argues that the three domains schema embodies a distinction between the actual and the non-actual real. Regardless of whether we call them domains we need to retain this distinction. Third, Tobin Nellhaus argues there are several reasons to uphold the three domains, but "the empirical" is flawed and must be enfolded within a more encompassing theory. Fourth, Ruth Groff argues that the metaphor of ontological stratification is a problem when readers take it literally, often misconstruing the actual metaphysical content it is meant to capture.

Keywords: domains of reality; critical realism; Bhaskar; causal powers; ontology

Tom Fryer and Cristián Navarrete: Let's stop talking about the three domains of reality

We think critical realism would be in a better place if we stopped talking about the three domains of reality. Before we start, it is worth saying that the three overlapping domains of reality (the empirical, actual and real) is one of critical realism's most central conclusions, and one that Roy Bhaskar outlines early in *Realist Theory of Science* (RTS) (see Table 1). More than this, when we come to explain critical realism to other people, it is one of the first things that we tend to mention: "*Critical realism is a realist theory, and specifically it says there are three domains of reality*." This reliance on the three domains to introduce and explain critical realism has become a habit for many of us—it is how we first learnt about critical realism, it is how we see people write about critical realism, and it is how we have taught others about critical realism.

However, we think that the time has come to look at this habit with a more critical eye. We are going to argue that we should stop talking about the three domains of reality because (1) they are redundant, (2) they are confusing and (3) we have got no reason to think they exist.

Table 1. Defining the three domains of reality, adapted from Bhaskar (2008: 13)

	Domain of real	Domain of actual	Domain of empirical
Causal mechanisms	✓		
Events	✓	✓	
Experiences	✓	✓	✓

Argument 1: The three domains of reality are redundant

If you already have the concepts of *experiences* (the perceptions of things by agents), *events* (the things that are being perceived) and *causal mechanisms* (the things that tend to produce the events),² then the three domains of reality are redundant. They do not add much to our understanding of the world.

If we know the difference between experiences, events and causal mechanisms then we are already in a pretty good position to go and do scientific research in a coherent way. The concepts allow us to understand what our data is (often agents' experiences of events), and what we should be aiming to do (offer explanations of how causal mechanisms bring about the events and experiences). It stops us falling into the trap of focusing on what we can measure and observe (events and experiences), and keeps us on the task of finding the underlying causal mechanisms.

For a scientific researcher that understands the differences between *experiences*, *events* and *causal mechanisms* we cannot see any extra insights that come from adding the three domains of reality. They are redundant.

Argument 2: The three domains of reality are too confusing

It is also much simpler to talk about experiences, events and causal mechanisms compared with the three domains of reality. After all, you cannot explain the three domains of reality without firstly introducing experiences, events and causal mechanisms—that is exactly what Table 1 tries to do.

This is anecdotal, but in our experience, people tend to find experiences, events and causal mechanisms reasonably easy to grasp. The idea that there are *experiences* (the perceptions of things by agents), *events* (the things that are being perceived) and *causal mechanisms* (the things that tend to produce the events) is often accepted as intuitive.

However, it is the opposite for the three domains of reality. Whenever we have spoken to people about critical realism, they often specifically mention the three domains as something they were struggling to grasp. This conceptual challenge applies to both the nature of the domains ("Why are the domains overlapping?"), as well as how to apply this in their research ("How do I know which domain I'm looking at? If I interview someone about their experience, is this in the empirical, the actual or the real?").

Maybe the people we speak to are confused because we are not keen on the three domains of reality and do a bad job of explaining them. But maybe these people's intuitive dislike of the domains is telling—maybe the three domains of reality are too confusing and ultimately add little to our understanding.

If the domains of reality are both redundant and confusing, and if people find experiences, events and causal mechanisms relatively straight forward, then critical realists should stop talking about the three domains. We should always strive to give the most accessible accounts of critical realism, enabling more people to benefit from its insights. Not to do this just puts up barriers—it is gatekeeping.

Argument 3: The three domains of reality do not even exist

We think that the case against the three domains already holds based on our first two points, but we want to make a third argument. We believe that there is no reason to think that the three domains of reality exist. Let us be clear: we do think that reality consists of experiences, events and causal mechanisms as Bhaskar outlines them in RTS, but we do not think there are three overlapping domains of reality.

To understand this argument, we need to revisit RTS and the reason we can be confident that critical realism gives an appropriate ontological account of the world. Our confidence in critical realism's conclusions comes from working out what the world must be like for scientific experiments to be possible. It is this retroductive reasoning that holds much of critical realism's power.

Now, it is perfectly possible to explain why experiments have a special place in knowledge production without mentioning the three domains. With the distinctions that Bhaskar makes between experiences, events and causal mechanisms, we are already in a position to say: scientific experiments have a special role to play in knowledge production because they allow us to understand how causal mechanisms operate. They do this by creating a closed environment in which only one causal mechanism acts to bring about an event, thus giving us unique insights into the nature of that causal mechanism. Bhaskar makes this exact argument in RTS (2008: 33-35) before he gets around to introducing the three domains of reality in the main text (2008: 56). In other

words, he already uses experiences, events and causal mechanisms to explain why scientific experiments are important to knowledge production, without any need for the three domains of reality.

Bhaskar does go on to use the three domains to offer an alternative explanation for why scientific experiments are important for knowledge production—he talks about experiments being important because they are an instance when the three domains are aligned or in-phase. However, Bhaskar does not make the case that this is a better argument or that this argument adds anything to the previous explanation that relies only on the concepts of experiences, events and causal mechanisms.

So, if we can understand the possibility of scientific experiment without the three domains of reality, this leads to an important conclusion: *it means we have no reason to think that the world actually is divided into the three domains*. If the three domains are unnecessary to explain scientific experiment, then we are left with no reason to think that the three domains of reality exist.

A counter argument: "It's all real"

Before we wrap up, it is worth mentioning a potential counter-argument. Someone might be in agreement with what we have said above, but be resistant to dropping the three domains of reality because this is a way to demonstrate that experiences, events and causal mechanisms are all part of reality. In other words, someone might say that 'the overlapping nature of the three domains places experiences, events and mechanisms in the domain of the real (see Table 1), and this is a powerful argument to show that they are all real. That is why we need the three domains of reality.'

This counter argument more or less resembles how Bhaskar develops his argument in RTS. He does seem to introduce the three domains of reality to try and clarify the relationship between experiences, events and causal mechanisms. More

specifically, he wants to think of the three domains of reality as overlapping because of a desire to show that *experiences*, *events and causal mechanisms are all part of reality*.

We disagree with the idea that removing the three domains of reality means that we automatically lose the idea that experiences, events and causal mechanisms are all part of reality. There is an alternative that evades this issue. We could simply state: 'experiences, events and causal mechanisms are all part of reality'.

Consider an example where we are talking about the domains of an orange. We might say that there are three domains of an orange: the domain of the juicy bit, the domain of the white bitter bit, and the domain of the zesty peely bit. All together they make an orange. We do not need to define one of the domains as the 'domain of the orange' to understand that the juicy bit, the white bitter bit, and the zesty peely bit are all part of the orange. It is more than enough to just say 'these three domains are all part of the orange.'. In the same way, if the counter-argument says that we need the three domains of reality to help us see that experiences, events and causal mechanisms are all part of reality then we can achieve this by just saying: 'Experiences, events and causal mechanisms are all part of reality'. There is no need for a complex concept like the three overlapping domains of reality to make this simple point.

In summary, we have tried to make the case that we should stop talking about the three domains of reality because:

- 1. They are redundant for researchers that already understand Bhaskar's concepts of *experiences*, *events* and *causal mechanisms*.
- 2. It is simpler and more intuitive to teach people about *experiences*, *events* and *causal mechanisms*.
- 3. They are not needed to show the possibility of scientific experiment, which means we have no reason to think that the three domains even exist.

Dave Elder-Vass: Maybe two parts of reality instead of three?

Roy Bhaskar's three domains of reality – the empirical, the actual and the real – are staples of many expositions of critical realism. In their provocative piece, Tom Fryer and Cristián Navarrete argue that we should stop using them because they are redundant and confusing. This post engages constructively with their argument. It positions the three domains as a rhetorical device rather than a fundamental element of Bhaskar's ontology. Then it asks what we might want to retain from the idea and how we might improve on it as a way of representing critical realism's ontology.

It argues that the three domains embody two significant distinctions. The first, between the empirical and what we might call the actual-but-not-empirical, is highly problematic. The distinction is contingent and arbitrary and serves no significant ontological role. Even as a rhetorical device, it is directed against a form of empiricism that hardly anyone endorses and thus serves no significant discursive role. By contrast, the second distinction, between the actual and the real-but-not-actual, is essential to critical realist ontology. Causal mechanisms can be real without being actual in two different senses, both of which are important to our understanding of causality. Still, the overlapping structure of Bhaskar's actual and real domains is confusing to explain, and the paper suggests an alternative: would it be more useful to distinguish between the actual and the *potential* as two ontological subsets, or aspects, or perhaps domains if the term is useful, of reality?

The three domains

As Tom and Cristián point out, Bhaskar summarises the three domains in a table in *A Realist Theory of Science* (see Table 1), which appears twice, once on page 56 in a section entitled "A Sketch of a Critique of Empirical Realism", but also on the second page of the Introduction. This positioning already tells us something. First, that it was

formulated as part of the critique of empirical realism, rather than as independent thesis about ontology. Second, that he found it important enough, and presumably clear and striking enough, to feature it very prominently at the beginning of the book, which no doubt explains why so many critical realists have been influenced by it and see it as significant for explaining Bhaskar's work.

The three domains perform at least two functions for him in the book. First, they combine and systematise two key insights into causality. One, that causal mechanisms may operate unobserved (the empirical/actual distinction). And two, that they may operate without having their characteristic effect, due to counteracting mechanisms, or even lie dormant and not operate at all when their triggering conditions are absent (the actual/real distinction).

Second, the significance of these two insights for him at the point where the diagram appears is that they are used to criticise competing understandings of science. The three domains operate as a rhetorical device that neatly and symmetrically expresses his critique of alternative perspectives on the operation of mechanisms. Those who ignore what happens unobserved can be accused of empiricism, which is a failure to recognise the domain of the actual (or strictly speaking, the actual-but-not-empirical, since the empirical is a subset of the actual). Those who ignore the unactivated mechanisms in the world can be accused of actualism, which is a failure to recognise the domain of the real (or, strictly, the real-but-not-actual).

Incidentally, apart from Bishop George Berkeley in the eighteenth century, most empiricists are quite happy in practice to accept that things can happen unobserved and their focus on experience is epistemological rather than ontological. The first critical argument, then, is a neat rhetorical flourish, but it is not particularly significant for the critique of contemporary empiricism.

My sense, then, is that the three domains were originally more of an expository device for clarifying his critique of the empiricist understanding of science rather than being intended to express his own ontological argument from first principles. But the trouble is that they have been used to do both of those jobs. It is therefore worth asking, as Tom and Cristián have, whether the diagram and the concept of the three domains really work as a way of explaining critical realism's ontological position.

The empirical and the actual

Read as a summary of an ontological argument, rather than as a critique of competing accounts of science, the three domains represent two distinctions. This section discusses the first one, the distinction between Bhaskar's empirical domain, composed of experiences, and everything that is actual-but-not-empirical, which I shall refer to as ABNE. Those other elements might include events that no-one experiences, but also those events that someone does experience, understood as events as they are in themselves, as distinct from the way we experience them. It also includes things or objects (I could argue the case for that from first principles, but Bhaskar (2008) also says so himself at the bottom of page 32).

We can read the argument in one of two ways, depending on whether we think of the empirical as a domain in Bhaskar's ontology or an object of critique defined in terms that would be acceptable to the empiricists of Bhaskar's story.

In Bhaskar's ontology the distinction between the empirical and the actual seems to rest on the claim that my experience of an event may be distinct from the event itself – the event as it occurred independently of my observation of it. This is problematic as a distinction between ontological domains, because my experience is itself also an event. Granted, it is an event that happens in my head and so it is a different event than the one outside me that I am observing, but it is nevertheless an event. It is also a

different *kind* of event, but then there are many different kinds of event, so why would we mark this kind out as ontologically different? From the point of view of an analysis of science, the reason for distinguishing our experience from that which is observed is clear: observation is a crucial element of the process of science. Once we move from the critique of empiricism to the business of establishing a realist ontology, however, science is just one small corner of the universe and it is by no means clear why we need to see one aspect of it as a separate ontological domain.

For the putative empiricists that Bhaskar is criticising, on the other hand, the distinction between an event and our experience of it collapses: "whatever men currently experience is unquestionably the world" (I confidently hope that he really meant people, regardless of gender, rather than men) (2008: 58). There is no event beyond our experience of it for the thoroughgoing empiricist, since our experience *is* the event. This could be critiqued by asserting the view of experiences described in the previous paragraph, but Bhaskar also develops his transcendental argument: for experimental science to make sense, it must tell us something about events in the world beyond the experiences of scientists, or what would be the point of doing it? But if there are events other than those the scientists experience, then this variety of empiricist philosophy of science is incoherent.

But this version leaves us with an arbitrarily anthropocentric set of domains.

Bhaskar (2008) says something similar himself on pages 16 and 58. Let's see first why it is anthropocentric, and then wonder why he would admit to it later. It is anthropocentric because it assumes (and Bhaskar (2008) is quite explicit about this – see pages 32 and 34) that it is the domain of specifically *human* experience. But why should the experiences of human beings be marked out as sufficiently ontologically special as to deserve a whole domain of reality? What about, for example, the experiences of dogs

or earthworms or intelligent aliens if there are any? Does this mean we will also need a domain of the Martian empirical, a domain of the canine empirical, and so on, in a completed ontology?

I don't think we will, because I think this distinction should remain firmly in the space of his critique of empiricist philosophy of science, and not at all in his substantive ontology. In the critique it makes perfect sense: the issue at stake is what is involved in humans studying the universe, and so human experience has a special place in the argument. And it makes sense for a second reason, too. His critique is framed as an *immanent* critique of empiricism, which is formed by taking the empiricist argument and showing how it is incoherent. He therefore takes the special place of human experience as a starting point because it is part of the argument he is seeking to expose. And that, of course, is why he is prepared to criticise the privileging of experience as anthropocentric: it is an element of the empiricist object of his critique.

The net result, though, is that there doesn't seem to be a good reason for distinguishing a separate domain of the empirical to contain experiences in a critical realist ontology.

The actual and the real

The second distinction, between the actual and non-actual elements of the real, is much more important. The actual includes all of the things we have just been discussing — experiences, events, and things, as a minimum. As I understand it, this includes everything that exists in a material form and everything that happens to anything that exists in a material form. According to Bhaskar's table, the non-actual part of the real, the real-but-not-actual or RBNA, includes mechanisms. As he often identifies mechanisms with powers it may also include those.

This distinction, by contrast with the first one, is both profound and fundamental to the critical realist account of causality, although there is again some ambiguity (of a different kind) about exactly what we should include in it. Let me focus on the key question, which I've illustrated sometimes with the example of a laser pointer. A laser pointer is a small handheld device which projects a dot of light onto a surface when a button on the device is pressed. There is a mechanism, a process of interaction involving electrical wires, switches, light emitting diodes, and other things, which operates when the button is pressed (subject to certain other conditions being satisfied, such as the device having a charged battery in place). As a result of the mechanism, the device has the causal power to project a dot of light onto a surface. When such a device exists and the button is not being pressed, there is a sense in which the mechanism is a real potential of the device, but the events that constitute the mechanism are not occurring and so the mechanism is not actual. The mechanism is real but not actual. When the button is pressed, the process starts to run, the mechanism is actualised, and the power is exercised.

This suggests a challenge to Bhaskar's division between the domains: if a mechanism is constituted by interactions between the parts of a material thing, then those interactions would seem to be events and thus to belong in his domain of the actual. This is an argument I worried about in one of my early papers (Elder-Vass 2007), and I've heard several other people worry about it too. But I don't think it undermines Bhaskar's point. Yes, at times mechanisms become actualised as events, but it is fundamental to explaining causality to recognise that things have mechanisms (and the powers that they produce) as potentials even when they are not operating. And this, it seems to me, is why we need some space in our ontology that accommodates non-actual mechanisms and powers.

If you're not yet convinced, consider the ambiguity I promised you earlier, which can be illustrated using a slightly different case: Was the potential of laser pointers to project a dot of light onto a surface real before the first laser pointer had been created? I think it is obvious that it was, and thus we have what might seem to be a second kind of potential: not a potential that is implicit in actually existing things, but a potential that could be realised if and when we created such things. That's something real that seems very clearly not actual. (What's less clear to me is whether Bhaskar intended to include this second understanding of mechanisms in the real but not actual when he formulated his three domains.)

An ontology that only has room for the actual – things that exist and the events that occur to them – will be unable to explain causality because it will have no space for the unrealised potentials of the world that only become activated in certain circumstances.

The actual and the potential

The consequence is that I'd be happy with Tom and Cristián's proposal to stop talking about the three domains, but I do think it's essential to continue to talk about two of them: the actual and the non-actual real. Still, "the non-actual real" or the "real-but-not-actual" are hardly terms that slip off the tongue. Part of the problem is that they label one of the most fundamental and distinctive elements of critical realist ontology, not in terms of what it is but in terms of what it is not. But Bhaskar doesn't even give the real-but-not-actual a name in RTS. It's hardly surprising that people struggle to make sense of it.

That would be much simpler and clearer if we could have a positive name for the RBNA (or at least the element of it that I have focused on here) that encapsulates the significant contribution it makes. I can't claim to have thought through the alternatives in any detail, but how about 'the potential'? Then we could just say that 'the real includes both the actual and the potential', using 'the actual' as Bhaskar did and 'potential' as I have above. I don't mind whether we call these domains or something else, but it is worth stressing that, unlike Bhaskar's domains, they do not overlap with each other. This does leave open the question of whether there is anything else that is real but not actual, but that's a topic for another day (and some of my old blog posts: Elder-Vass 2015a, 2015b).

So, then, let's return the three domains to what was probably their original purpose: as a rhetorical device for expounding Bhaskar's critique of empiricist philosophies of science, rather than a fundamental ontological structure. But let's rescue the distinction between the actual and the potential, since it is crucial to the critical realist enterprise.

Tobin Nellhaus: There are three domains—just not exactly Bhaskar's³

Tom Fryer and Cristián Navarrete argue that "domains" talk is confusing and redundant (the terms mechanisms, events and experiences are sufficient), and that domains don't even exist since everything is real. In response, Dave Elder-Vass contends that we should absorb the domain of the empirical into the domain of the actual, but keep the distinction between the real and the actual. I will argue instead that there are considerable reasons to preserve both the concept of domains and a third ontological domain.

First, though, I agree with Dave (to whom much of my response is directed) that we must preserve the real and actual domains. The distinction is a vital element in critical realism. I'm less persuaded by his proposal to call merely latent powers "the potential," since the word "latent" suffices, and for various reasons I would rather rename the entire domain from "the real" to "the potential." But the matter isn't

significant here, so I will continue to use "the real." However, I will urge a fundamental amendment to "the empirical."

To the main issue, then: the proposed elimination of the actual/empirical distinction. One of my concerns is that the metaphor of "domains," sometimes described as "levels," obscures an important point. Reexamine Bhaskar's famed table of the domains (Bhaskar 2008: 13, 56; reproduced as Table 1). As we all know, it distinguishes between the real, the actual, and the empirical in a qualitative manner—but crucially, it doesn't present them as separated layers of a birthday cake: they are (also) subsets. The domain of the actual is part of (included within) the real, and the empirical is part of the actual, and thus also real. Experiences are real and actual and empirical, rather than just one of them. (Bhaskar shorthands this as $d_r > d_a > d_e$ in *Dialectic* [1993: 207].) The metaphor for Bhaskar's ontology is more like a wedding cake: layers if you look from the side, concentric circles if you look from above.

The latter perspective often seems to get lost. Bhasker's use of subsets obviates Tom and Cristián's argument that everything is real, because it's already part of Bhaskar's theory. His ontology also already incorporates Dave's key claim. But we can watch Bhaskar's concept of the empirical as a subset vanish when Dave moves from an off-hand mention that for Bhaskar, "the empirical is a subset of the actual," to a far more forceful statement that the actual/empirical distinction itself "is problematic as a distinction between ontological domains, because my experience is itself also an event," on which he bases much of his subsequent argument that "the empirical" is merely an expository device. For Dave, experiences are just one type of event among myriads of others.

However, recognizing that Bhasker's ontology involves subsets doesn't by itself mean you can't fully collapse or absorb the empirical into the actual; all it tells us is that

in Bhaskar's view, the empirical in fact is already within the actual. What's really at stake, as Dave correctly observes, is the rationale for differentiating the two sets to the point that the empirical even constitutes a domain. I will argue that Bhaskar's approach is indeed faulty: nevertheless some such ontological domain is crucial for critical realism, even if his version is ill-conceived.

Dave acknowledges its awkwardness and attempts to rescue the empirical from its anthropocentrism by arguing that in A Realist Theory of Science, Bhaskar was specifically thinking about science, paradigmatically the natural sciences, as a human practice. Which is true. Bhaskar turns to the social sciences in *The Possibility of Naturalism.* There he merely reiterates his concept of the domains (Bhaskar 1989: 15), but one might again permit that usage because he was focusing on human activity. But curiously, he doesn't dispose of it in *Dialectic*, where he reframes the "original critical realism" of A Realist Theory of Science and The Possibility of Naturalism. To the contrary: he reinforces it by introducing two more domains (!), the positive and the subjective, both of them residing below the empirical—and both of them human (1993: 11). Clearly he views the empirical domain as ontologically substantive, and not a rhetorical device as Dave hopes. But Bhaskar doesn't make anything of the two new domains *qua* domains, and we shouldn't either: they do nothing ontologically distinctive—certainly nothing comparable to the real vs the actual. Hence there's no strong reason for us to stop calling his third domain the empirical. One could call it the subjective or the positive, but the upshot would be the same, which Dave and I agree upon: Bhaskar's empirical domain is anthropocentric, full stop. That is a dubious basis for establishing a whole ontological domain.

Still, the two-domain thesis faces an important problem: how does it account for varying interpretations of natural phenomena? "The sun revolves around the earth" and

"The earth revolves around the sun" are both interpretations of a particular recurring event. Some people still even claim the earth is flat. The validity of these theories is not the question, only that they interpret the same thing differently. How do differing views not become conventionalist "mere and equally valid" interpretations? How can collapsing the empirical into the actual contend with these difficulties? Are different interpretations simply different synaptic firings? How can that possibly be if everyone's brains differ and thus different synapses are involved—yet all English speakers understand the words "The earth is round" more or less identically, and they mean nothing to people who have never encountered English. In short, where do we locate meaning? Can the mind really be reduced to the brain?

For critical realism this is no small matter—it is tied to several other arguments. One of Bhaskar's major theses is his distinction between the intransitive and transitive dimensions of studying reality (the conduct of science, historiography, psychotherapy, etc.). The intransitive dimension (ID) consists of the objects that we examine, as they exist independent of our thoughts about them; the transitive dimension (TD) is our thinking about these objects, an activity that involves the entire material, social and cultural infrastructure behind research (preexisting views, technology, funding sources, attitudes, gender discrimination, etc.). At root, however, it is the distinction between ontology and epistemology—the foundation of *any* realism. Conversely, conflating being into our knowledge of being is the definition of the epistemic fallacy. The TD/ID distinction also implies that thoughts about real entities—interpretations of it—*can* vary: a single object in the ID can be understood variously in the TD.

Notice that the TD/ID distinction does not mean mental vs extramental, respectively: we can think about (TD) our own thoughts (ID). (Translating TD/ID into mental/extramental is handy, but imprecise.) One way Bhaskar puts this is by saying

epistemology is contained within ontology, in the sense that thought is real. Let's dwell on that a moment. It upholds the containment or subset series of the domains, as discussed earlier. But it also insists that ideas are real. The latter point is the essence of a crucial argument in *The Possibility of Naturalism*: reasons can be causes, which is absolutely necessary to uphold agency. Since thoughts have causal powers, they are real entities, even though particular thoughts may or may not result in actions. The opposite claim—that thoughts are unreal—is a standard empiricist position.

The transitive dimension is closely related to part of Bhaskar's "holy trinity" of critical realism: ontological realism, epistemic relativity, and judgmental rationalism. Epistemic relativity pertains to the fact that all knowledge is sociohistorically produced, and we always recognize objects under some description rather than through some sort of purely objective and direct contact with it. A solid grasp of epistemic relativity is crucial to many fields, such as history and ethnography, and eliminating a third ontological domain would be utterly debilitating.

We've now arrived at a fork in the road: what to do with the empirical domain and its anthropomorphism? One option is to explain it away, such as by excusing it as a rhetorical device, which as I've shown conflicts with *Dialectic*; dismissing its return in *Dialectic* as an aberration (indeed, some critical realists consider the whole book an aberration); or treating the domain's anthropocentrism as an artifact of the purpose of Bhaskar's project but not otherwise problematic. Or instead, we can recontextualize the empirical domain and its anthropocentrism by planting it within something with a wider ontological scope—the option I am urging. Such is already evidenced by the fact that I've moved quite a bit past "the empirical," which is just one type of meaning, thought, or experience.

Toward that goal, I've shown that the two-domain thesis fails to account for meaning as a special sort of actuality. But, one might counter, no matter how convincing my arguments that thought is special among all the events in the domain of the actual and that it plays crucial roles in critical realist theory, I still haven't fully justified the claim that it constitutes a distinctive ontological domain. So next I will show that we do have to establish some such domain, akin to Bhaskar's empirical domain but stripped of its anthropocentrism. For the moment, I will call it the domain of meaning, despite the lingering anthropomorphism of that term. It is of course actual and real, per my discussion above.

To achieve that justification, I must return to a point on which Dave and I already agree: there is a valid distinction between the domains of the real and the actual. The domain of the real consists of the transfactual existence of causal (and thus real) powers and mechanisms, and the actual emerges from the interactions among those powers and mechanisms. These interactions within the actual can even produce new powers and mechanisms within the real that can be neither reduced to nor deduced from their constituents. A simple example is the interaction of hydrogen atoms with oxygen atoms that produces water, which has characteristics irreducible to its constituent atoms. A far more sophisticated instance is DNA, which consists of a structure of elements underlying a startling new power: life. Among other things, living beings can act back upon denizens of the physical world, such as by consuming gases (like oxygen) and minerals (like iron), through which they maintain their existence and reproduce themselves. But the development of new powers and mechanisms isn't the only thing that creates new realities: for instance, if an asteroid larger than the one that killed the dinosaurs were hurtling toward the sun, the result within the real domain would be quite

different if the earth were directly in between than elsewhere. No new power would arise, just a new but real situation, with real consequences for future events.

Thus when powers and mechanisms (within the domain of the real) interact (domain of the actual), the result is a new reality affecting future interactions, even if that future can be fully predicted from the components' powers. The process through which interactions between real entities produces actualities (even new powers and causal mechanisms) with consequences affecting reality is called emergence. In other words, the nature of the difference between the domains of the real and the actual—the criterion explaining the ontological distinction between them—is *emergence itself*.

The very same criterion justifies distinguishing the domain of meaning from the domain of the actual: meaning is emergent from the innumerable events that occur (including ones in brains). In particular, it consists of a wholly new order of power altogether, because *meaning is not physical*. Its lack of physicality is why empiricism calls thoughts "unreal." Meaning requires a physical substratum, such as neurons, but the power isn't itself physical and can't be reduced to synaptic firings. Its materiality, so to speak, consists of relationality. Nonetheless, because it's a power, meaning is real. It can act upon actualities, such as by becoming the reasons for an agent's activity. There can even be "mind over matter," through neuroplasticity. One of meaning's possible actions, namely the effort to understand actualities, in fact comprises the transitive dimension, and this activity can occur in various ways, resulting in divergent interpretations of the entities constituting the intransitive dimension. Emergence is the condition of possibility for varying interpretations of actual events, forestalls the reduction of thought into brain matter, and prevents the domain's absorption into the actual.

To my knowledge Bhaskar connected domains to emergence only in passing and only with regard to the real and the actual (1993: 237) and he used the concept primarily for entities (1993: 49-56). But that's unimportant: the concept of emergence does justify the concept of domains. In doing so it legitimizes the (circumspect) use of the "layers" and "concentric circles" metaphors, at the same time demarcating the metaphors' limits, because emergence involves the porosity of interaction—the entities and events at the higher levels depend on the lower levels, yet they may be capable of acting upon those levels. But their legitimacy also depends on recognizing they are models; as soon as one forgets their limitations, such as by forgetting the role of emergence (and its concomitant interaction and porosity), the metaphors become reified and poor models. Thus Tom and Cristián's case for speaking solely of concrete mechanisms, events and experiences may be fine for non-philosophical and introductory conversations, but within critical realist philosophy the term "domains" reflects important ontological differences. The emergence of real powers, mechanisms and entities (e.g., quarks to atoms to molecules to life forms etc.) is ontic; the emergence of domains is ontological.

It remains to de-anthropomorphise the domain of meaning. If meaning is an emergent domain, it must emerge contingently, from specific entities: in particular, from living beings. Indeed, even the word "meaning" is dodgy and anthropomorphic. All living beings possess a "meaning system" of varying complexity. Animals other than humans have experiences or perceptions of the world around them, and they respond to those perceptions; if they didn't, they wouldn't survive even the first round of Darwinian selection. Many non-human creatures have in some sense a concept of numbers. In humans the system (and its physical substratum, the brain) is so sophisticated that it can operate through wholly arbitrary symbols such as language. Its power extends to objects that aren't present or physical—it can refer to objects that are

absent ("I can't find my keys!") or abstract ("systems"), and it can produce a host of non-actual states and entities, including fictions (e.g., Anna Karenina and Wookiees); counterfactuals ("If Hilary Clinton had been elected President instead of Donald Trump, there would be more liberals on the Supreme Court"); projections of the future ("I'll go to bed early tonight"); impossibilities (like time travel); and many more. So finally, in a move that permits non-human beings to possess something akin to concepts, indeed fully de-anthropomorphizes the domain, I reconceptualize the domain of "meaning" as the domain of *semiosis*, that is, semiotic activity. Thus there exists, for example, the scientific field of biosemiotics.

Critical realism needs a way to theorize the reality of non-human as well as human perception, and semiosis is it. By no means do the concepts of human perception and experience disappear or depreciate when we supplant the empirical domain with the semiosic domain. All that happens is that humans are put in their rightful place: on a tiny planet at the outskirts of the gargantuan universe of semiosis—a place extremely important and central to our own concerns, but no longer at the center of existence. The emergence of semiosis as a non-physical, relational power justifies establishing a new ontological domain within the domains of the actual and the real. Collapsing the semiosic into the actual is tantamount to conflating being and knowledge of being, and rejecting epistemic relativity. In short, if no domain of semiosis, then no critical realism.

At the technical level, my own theory of the semiosic domain is a slightly modified version of Peirce's semiotics (Nellhaus 1998 remains largely current), which has numerous advantages over Saussure's, including a connection to Bhaskar's own theory (1993: 222-23), anti-anthropocentrism, and an additional rationale for considering the semiosic as an ontological domain; but even if one prefers Saussure's semiology (which is restricted to humans), semiosis stands as an ontological domain

emergent from within and distinct from the actual, which in turn is emergent from within and distinct from the real.

Against Dave's view that the third domain was merely a rhetorical device for articulating a realist theory of science, and a rather pointless one at that, let me emphasize that Bhaskar's theory is a theory of *science*—that is, knowledge. His theory rightly focuses on ontology, but its *raison d'être* is epistemology. And knowledge must have a real existence in order to have a content. The nature of that existence is semiotic.

Bhaskar's concept of the empirical domain fails because although the general idea behind ontologically differentiating the "empirical" from the actual is correct, the content of his third domain—experiences—is empiricist. That's really what's wrong with his actual/empirical distinction. As I put it elsewhere (2022), "as long as critical realism shackles an entire ontological domain to 'experience,' it will surreptitiously harbor an actualist, anthropocentric and anthropomorphic ontology."

Ruth Porter Groff: There Aren't Really Three Domains: or, Metaphor Is Great, Except When It's Not

Thank you to Tom Fryer and Cristián Navarette for their post on Roy's metaphor of ontological stratification – i.e., the so-called 'three domains' of reality – and for Dave Elder-Vass' and Tobin Nellhaus' subsequent responses. Thanks too to Dave, for the invitation to join the conversation.

One big problem with metaphors is that a certain type of reader – of which there seems to be no shortage - is tempted to reify them. A particularly egregious example of this is Marx's metaphor of base, structure and superstructure. 160 years on, it's still necessary to point out that Marx was talking about societies, not about buildings. While he used an architectural metaphor to say something important *about* society, he was not saying that societies *are* buildings. If nothing else, societies are composed of social

relations (themselves composed of, but not reducible to, individuals). For this reason alone, the metaphor only goes so far: social relations do not actually sit atop other social relations as the 8th floor sits atop the floors below it. Marx's was not trying to tell us that society is a three-story edifice. Or even a pyramid of acrobats or cheerleaders. Rather, the claim (correct or not) was that it's possible to distinguish between the social relations that constitute different institutions and practices, and that some social relations have a greater effect upon the nature and operation of the whole than do others.

Tom and Cristián object to Roy's metaphor partly on the grounds that it's redundant. We have perfectly adequate, non-metaphorical ways to say the same thing, they observe, and to do so in an arguably more accessible way. I don't disagree with them, but I think that the objection is not pointed enough. There's always a non-metaphorical way to say the metaphorical thing. Nor is it simply that the metaphor — with its accompanying table of categories — is confusing, as they also contend. The precise problem (in my view) is that, as with Marx's metaphor, readers tend to interpret Roy's metaphor of ontological stratification literally, or at least close to literally, and in so doing they misconstrue, or even miss altogether, the claims about the world that the metaphor is meant to capture. It's the same, as it happens, with Roy's talk of transitive and intransitive 'dimensions,' which grew out of a distinction made early in *RTS* between the transitive and intransitive objects of scientific inquiry.

If Marx's base-structure-superstructure metaphor has led generations of readers to imagine that society is a parking garage, Roy's ontological stratification metaphor leads readers to conceive of society as a kind of curiously disaggregated rock face, where each of the levels of sedimentation is somehow spatially discrete (when and as needed), and the deepest level is invisible. Indeed, with the help of the table that

accompanies the metaphor, readers often go on to assign phenomena to levels that have now become boxes – in a manner akin to sorting clean laundry. All of this is unfortunate – and, as Tom and Cristián suggest, leads to convoluted thinking. I would add that in addition to being convoluted, the thinking is often rote, technically dogmatic.

I agree with Tom and Cristián that an obvious remedy is to simply state the ideas in a non-metaphorical way, at least by default (rather than the other way around, with the *non*-metaphorical expression coming as an afterthought, as is so widely done at present).

But what *are* the non-metaphorical ideas?

The driving question of *A Realist Theory of Science* is "How can it be that so-called 'laws of nature' hold even though the regularity in terms of which they are defined by Humeans and Kantians alike does not obtain?" How is it that laws hold 'transfactually,' to use Roy's term? Roy's answer, of course, was that regularity, such as it is, is epiphenomenal. It is the powers of things, as he had it (others might say that it is the powerful things themselves; I say that, for instance (Groff 2020)), that, when expressed or exercised, sometimes (depending upon the nature of thing and the kind of power) yield outcomes that occur predictably, or regularly – which outcomes, when they do occur, are sometimes observed, though not always.

This core claim sustained a reconceptualization of 'laws of nature', such that the answer to the question of how they hold transfactually is that they are best conceived as being a function of (the) powers (of things), and powers do not go away when, for one reason or another, they have not been expressed, or actualized – let alone if they have merely not been observed. The metaphor of ontological stratification is supposed to capture this bit of neo-Aristotelian ontology. 'The Real' represents the idea that (as per Aristotel) powers exist even when they are not being exercised. 'The Actual' represents

the idea that any given power *may* be exercised, even if being so is not a condition of its existence. 'The Empirical' represents the idea that being observed by a subject is also not a general existence condition for (the) powers (of things). Finally, the formula 'R>A>E' tells us that at any given moment not all powers are actualized, and not all actualized powers are observed. Notice that these relatively limited claims are different from what readers of critical realism often come away imagining the point of the metaphor (or its accompanying table) to be.

Having transposed the metaphor back into non-metaphorical language, we can see that while the relevant content pertains to a precisely formulated question about laws, it contains quite a lot of metaphysical content. It is at once an endorsement of Aristotle and a rejection of both Hume and Kant. It connects, via realism about powers, to a theory of causation. It has modal implications (in this regard, Dave is absolutely right, in my view, to emphasize the significance of the divide between R and A, implying as it does a commitment to the phenomenon of real potentiality).

But the metaphor, as I suggested at the outset, is not a reliable short-cut for any of this. It only does the work of imparting said content if one is already cognizant of the content. If you want to understand Bhaskar on causation, you can't just read it off of the concept of 'ontological stratification.' You have to deal with the whole account.

Admittedly this sucks a little, since *RTS* isn't all that well-written, and working through it calls for more interest in philosophy than most readers who aren't philosophers can be reasonably expected to muster.

Of the four of us, Tobin seems to be the most committed to the existence of domains as a matter of metaphysics, although he thinks that the domain of the Empirical should be understood to consist not of perceptions or observations of regular sequences, but of meanings. Meanings, he adds, are emergent phenomena, and emergence, he says,

is a (or even the) crucial phenomenon that the distinctions between domains is meant to track.

I agree that critical realists who study social phenomena do and must attend to meanings. All the same, with respect to the notion of 'ontological stratification' it seems to me that the 'domain' of the Empirical really does need to be defined in terms of experience, given what Roy was doing with the metaphor in the first place. Tobin is right to remind us that subjectivity is not exhausted by perception. But where subjectivity figures in the case for transcendental realism is in the idea that laws of nature – reconceptualized by Roy as functions of causal powers – are not existentially contingent upon their being experienced. Trees fall even when no one is in the forest. As Dave rightly notes, this claim – indeed, transcendental realism itself – is designed to counter the Humean approach to laws that was utterly orthodox in the mid-1970s within analytic philosophy of science, though I would add that it is also meant to apply to the Kantian variant of that approach. If nothing else, both Hume and Kant tie causation itself to phenomenon of experience, albeit in different ways. As for emergence, my own view is that critical realists (and others) should absolutely believe in the reality of wholes that do not reduce to their parts. Where that claim shows up in Roy's work, though, as I read him, is in his defense of what he (Roy) called Synchronic Emergent Powers Materialism, and I think that that's where it belongs.

To my mind, then, Tobin is right to direct us to meanings and emergence alike, but wrong to try to incorporate either or both into Roy's talk of the Real, the Actual and the Empirical. The metaphor presents us with enough difficulties as it is, without making it be a *mixed* metaphor.

So, should we retain Roy's metaphorical three-domains-talk, or not? I suppose that my answer is that we don't *need* the metaphor, but we do need the metaphysics that

it's meant to encapsulate. Perhaps this is to say that what we should do is de-emphasize the metaphor. Stop treating it as catechism. The substantive analysis of *RTS* does not reduce to "Bhaskar believes that there are three domains of reality." The sentence is *superficially* true, but the metaphor is just that: a metaphor. It's not literally true. Whether or not you find it to be a useful heuristic for communicating key aspects of a particular neo-Aristotelian ontology, the important thing is the metaphysics, not the device.

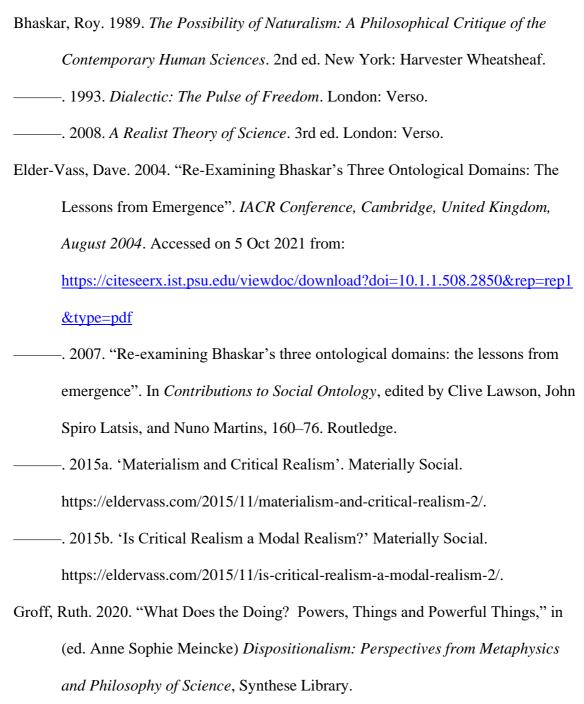
Endnotes

- 1. We take the three domains of reality to be the overlapping domains of the empirical, actual and real, as Bhaskar outlined in RTS (2008). This ignores the way Bhaskar developed the domain of the empirical into the domain of the subjective in his later work, as well as proposed modifications from people such as Nellhaus (1998), Elder-Vass (2004) and Holland (2019). We do this to make this debate as accessible as possible, and as we feel none of these developments avoid our arguments.
- 2. The aim of this first piece is to provoke discussions about the three domains of reality rather than provide a robust alternative. We assume that Bhaskar's existing definitions of experiences, events and mechanisms are appropriate, and that the domains add little to this. Our argument should not be interpreted as a claim that reality only consists of experiences, events and causal mechanisms, or the claim that these are the only ontological concepts we need. A robust ontology will involve several other concepts, such as *powers* or *tendencies*, to name but two.
- I would like to thank Tom Fryer for the opportunity to clarify aspects of my original blog post.

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Table 1. Defining the three domains of reality, adapted from Bhaskar (2008: 13)

	Domain of real	Domain of actual	Domain of empirical
Causal mechanisms	✓		
Events	✓	✓	
Experiences	✓	✓	~