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The Mark of the Individual

Individuation according to Caroline Levine and Manuel DeLanda

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Saving the Individual

Research Proposal to reinstall the individual back into New Materialism

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Declaration

I hereby declare and assure that I, Coen Pompstra, have drafted this thesis independently, that no other sources and/or means other than those mentioned have been used and that the passages of which the text content or meaning originates in other works – including electronic media – have been identified and the sources clearly stated. Place: Paris date: 27th of May, 2024.

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Abstract

The young philosophical current of New Materialism (NM) rejects both the focus on discourse of discursive philosophy of the 20th century, and anthropocentrism of the wider Western canon, deeming them unhelpful in combating the ecological peril our world is now in. NM's own solution to this global danger is to erect ontologies that concentrate precisely on the non-human, material components of our reality and especially on the interactive relations that exist between these components. In this emphasis on the relations between individual entities, however, NM often dissolves the individuals themselves into relational webs they maintain. This article discusses two theories associated with NM that have attempted to solve this problem of dissolving individuals: Caroline Levine's theory of forms, and Manuel DeLanda's theory of assemblages. Both try to protect the individual from dissolving by articulating unambiguous marks of the individual. To succeed at this, Levine uses the concept of 'affordances,' while DeLanda theorises the mark as virtual 'diagrams.' In this article, however, I argue that both attempts at protection, in the end, fall prey to the same threat of dissolving individuality as did the NM theories before them. I conclude with three recommendations to help NM get over this conundrum.

The Mark of the Individual

Individuation according to Carorline Levine and Manuel DeLanda

Some thirty years ago, a new genre in philosophy was born that has been steadily growing in popularity ever since. It carries the name New Materialism (NM), and it emerged as a critical response to the direction continental philosophy had taken in the 20th century. NM scholars consider this direction to focus too much on how discourse, language, and human power relations work. In this focus, the countless ways in which *material* objects and artifacts constitute reality are *excluded*, NM authors argue (Bennett 2010, 17; Bryant 2014, 2; Dolphijn & Van der Tuin 2012, 91; Coole & Frost 2010, 3; Morton 2016, 26).[1] Instead of erecting a metaphysics of discourse, therefore, NM concentrates on constructing new metaphysical systems that take both the discursive, and the material components of reality into account.

Naturally, this revaluation of the non-discursive universe is characterised by a broad diversity of thought. Many of its theorists, however, defend two metaphysical theses that, in combination, lead to an as of yet underdefined and underappreciated problem.

The first thesis says that reality exists solely out of individual, material entities and the immaterial entities they realise – stones, trees, and human minds are in this sense all equally part of reality. Every entity, moreover, solely becomes through interactions with and between its neighbouring entities (DeLanda 2016, 139). There is, hence, no *transcendent* power, structure, or law that determines such interactions (Harman 2016, 14).[2] NM theorists therefore also deny that any such material or immaterial entities have *essences* outside of their interactions with other entities. Bennett for instance speaks of reality as a "turbulent, immanent field in which various and variable materialities collide, congeal, morph, evolve, and disintegrate" (2010, xi).

The second thesis proffered by this current in NM dictates that the primary quality of all these entities is their *agency*, in the sense that entities are taken to *be* what they *do*. This agency is, however, not seen as a property of *individual* entities, but as "distributed" or "confederate" (Latour 2005, 50; Bennett 2010, 23). Agency is here always something that is distributed across a group or confederation of entities, with individual entities only *partaking* in the agency. Using the term 'assemblage' for individual entities, DeLanda for instance writes that "assemblages exist as part of populations […] and it is from interactions within these populations that larger assemblages emerge as a statistical result," (2016, 20). In her book *Vibrant Matter,* Bennett even goes so far as to suggest that

[1] This article is not concerned with the question if this critique is accurate, it takes the critique for granted.
[2] The precise arguments for this view are, although philosophically very interesting, not the focus of this article.

> [t]he sentences of this book also emerged from the confederate agency of many striving macro- and microactants: from "my" memories, intentions, contentions, intestinal bacteria, eyeglasses, and blood sugar, as well as from the plastic computer keyboard, the bird song from the open window, or the air or particulates in the room, to name only a few of the participants. (2010, 23)

The combination of these theses – all that exists are individual material entities and the immaterial entities realised by them, and the agency of these entities is always part of a larger agentic confederation – generates a metaphysical puzzle: where can that which is particular only to the individual – the 'mark of the individual' – be found?

As NM rejects any essential properties outside of the interactions entities partake in, entities are denied their 'own' properties beyond what they *do*. Yet clearly the mark of the individual cannot be found in what the individual *does*, as the actions of entities are taken to be produced by an agency that is distributed across a confederacy of entities; the action of writing *Vibrant Matter*, for example, cannot only be attributed to the individual Jane Bennett, but must be attributed to a much larger working group including a 'keyboard,' 'bird songs,' and an 'open window.'

The mark of the individual also cannot be situated in the ensemble of components that constitutes the individual. Such components are again individual entities resulting from broader, agentic confederations. Bennett, for instance, also cannot be characterised by components like her brain; as this again is the product of a broader confederation of genetic codes, the author's food intake, and the wide range of behavioural patterns the individual author partakes in. We are thus confronted with an infinite regression, as this same reasoning can be applied to any individual and each of its components: each entity's individual agency can always be considered as just another node in a web of agencies, without ever encountering an individual with actual properties *from which* such confederate agency could be generated.

The metaphysical puzzle is thus not solved easily, there remains a tension between the two theses. Due to the second thesis' focus on confederate agency, the first thesis' individual, material entity even seems to become untenable: we are rather confronted with one, "single substrate" (Bennett 2010, xi), pulsating blob of "matter-energy" (122). This problem has not gone unnoticed in scholarship. In his *Alien Phenomenology*, Ian Bogost signals the same tension in Latour: "in the networks of actor-network theory, things remain in motion for more than they do at rest. As a result, entities are deemphasized in favor of their couplings and decouplings" (2012, 7). We can also cite Harman's signalling of NM's weakness, which "lies in its inability to distinguish objects themselves from how they currently happen to be acting or otherwise manifesting in the world" (2016, 15). Similar further criticisms could be found in Basile (2019, 10), and Rosa et al., the latter

of which argue that "ordering [all entities] on one big "plateau" might risk not doing justice to *any* of these entities" (2021, 9).

In this article I examine the efforts of two theorists associated with NM which can be seen as offering a *solution* to this broadly acknowledged problem. These two theories on the one hand unambiguously mark individuality, and on the other hand remain compatible with the broader project of NM by affirming both theses discussed above. The first of these is DeLanda's assemblage theory, in which he criticises those philosophies that do not affirm the difference between the one entity and its capacities and the other (2016, 13). Such theories overemphasise the second thesis, thereby provoking a situation in which individual entities dissolve in the broader whole they are a part of – forming a "a seamless totality" that disallows for any mark of the individual (12).

The other theory that marks individuality and affirms the NM ontological framework is proposed by Caroline Levine. Coming from a background in literary criticism, she argues that describing social entities – like tax authorities, countries, and schools – as irreducible wholes/groups does not do justice to the complexities of the individual entities that realise them. Just like there are forms that structure and organise the literary texts we read, there are forms that structure the complex social and material entities we encounter around us. According to Levine, our ontologies need to investigate these forms to produce convincing accounts of individual entities (2015, 16, 28).

In the following, I first investigate both DeLanda's and Levine's ways of theorising the mark of the individual – the result of a process referred to as 'individuation.' Next, I evaluate both approaches to individuation in terms of explanatory power, for this I apply both theories to the individuation of an object with which everyone will be familiar: a restaurant. I use this evaluation to distil the ways in which DeLanda's and Levine's theories of individuation might provide conceptual tools to further develop NM philosophy.

Levinean Forms

With analytical handles like 'meter, seriality, and plot,' literary criticism has developed an extensive toolbox to examine its primary research subject: texts. Levine wants to reorient this toolbox, changing its aim from the literary, to the material and social reality these texts are embedded in; as Levine writes: "I seek to export the skills that literary critics have developed to read the world as form" (Levine 2015, 51).

It is this concept of 'form' that takes the central, organising role in Levine's work. Form here is taken in the broad sense of "an arrangement of elements – an ordering, patterning, or

shaping" (3). With such a definition, the extension of the term can only be very wide; indeed, it is. Levine distinguishes, among others, "forms of knowledge, forms of narrative, forms of subjectivity, forms of space, forms of circulation, forms of community, forms of worship, forms of administration, forms of intimacy, and forms of thought" (Levine 2006a, 635). In all these examples, *a form is a general pattern directing elements in different contexts in the same way*. We could for example point at the similarities between the organisations of blood circulation – all the fuel, information, hormones etc., go into a shared, circular stream that takes these elements where they need to be – and the organisation of a roundabout – traffic for all directions goes onto the same, shared road until the right direction can be taken. This is the type of very general, organising pattern that Levine points at.

In the following, I first examine the relation between this broad sense of organisation and the elements it organises, matter. After that, the forms and their capacities for organisation are taken into consideration. The last section attempts to derive a theory of individuation from Levine's theory of forms.[3]

What matters most

I want to conceptualise Levine's relationship between forms and the matter they organise via two tracks: first the properties of the connection between form and matter must be clarified, and then the genesis of these connections is brought into focus.

The relation between forms and the thing they organise, matter, is bidirectional: "[t]hings take forms, and forms organize things" (Levine 2015, 9). 'Things' here may refer to any kind of entity: to 'corporeal' matter – bricks, steel bars, etc. – but also to the 'incorporeal' matter realised by the corporeal matter – moral categories, laws, etc.

Although Levine does not use the term herself, one might best compare the relation between form and matter to emergent properties: out of material interactions first emerge certain forms – emergent causation – and, then, secondly, these forms go on influencing their constitutive materialities – downward causation. Interactions between the bricks, steel bars, moral categories and laws surrounding a prison cell may, for instance, cause a form like the 'enclosure' to appear (8). After having appeared, the 'enclosure'-form goes on influencing the materials that constituted it. It, for instance, limits the space of movement available to the prisoner.

[3] For this chapter I primarily use Levine's book *Forms*, its accompanying article "Forms, Literary and Social," and her earlier essays called "Strategic Formalism," and "Scaled Up, Writ Small".

Consequently, a certain inextricability exists between form and matter, in that there is no unformed matter, nor unembodied form (9): "[t]he prison cell cannot do its work without the hard materiality of metal or stone […] It is both a thing and a form" (10).

Still, this inextricable bidirectionality is not absolute, as Levine says that "[f]orm and materiality are inextricable, and materiality is determinant" (9). It is, in the first moment, matter that engenders the emergent forms; in the second moment the forms start organising the matter (Levine 2016, 76): the prison cell first has to be built, and put within a broader system of incarceration, before it can start organising the bodies of prisoners.

Levine conceptualises the emergence of forms and their subsequent influence on their elements through so-called *affordances*. 'Affordance' is "a term used to describe the potential uses or actions latent in materials and designs" (Levine 2015, 6). Both matter and form – Levine uses the term 'design' as synonymous with 'form' (xi, 6, 9) – have their proper affordances through which they influence one another and the entities around them (Levine 2016, 76). One of Levine's examples of material affordances is steel, which "affords strength, smoothness, hardness, and durability" (Levine 2015, 6); when steel is organised in the form 'fork,' however, the form that organises it produces its own range of affordances, like "stabbing and scooping" (6).

With the addition of affordances, Levine reworks the second thesis of NM, paving the way for more distinct theory of individuality. As this second thesis insisted on agency always being distributed across a larger working group of agents, it did not allow for the 'stabbing and scooping'-affordances of a fork to be attributed to the fork itself, but rather to the entire environment the fork is part of – including maybe the hand that pilots the fork, the substance being stabbed or scooped, etc. Levine, on the contrary, argues that the stabbing and scooping *as affordances* belong to the individual fork itself, in addition to the other affordances like hardness and durability afforded by the matter of the fork.

Consequently, Levine conceptualises the relationship between matter and form as a relation of emergence driven by the affordances proper to both poles: emergent causation happens through the affordances of the specific matter involved, while downward causation is enacted through the affordances of the form itself. These affordances imply a reworking of the second thesis of NM allowing for a more distinct individual.

Characterising forms

To fully understand the ways in which forms organise, we need to understand two of their main aspects: forms are forceful, and they are portable (Levine 2006a, 636-37).

According to Levine, there is "a force to forms themselves: a historical potential that inheres in techniques rather than persons" (636). 'Techniques' here, just like 'designs' before, is used synonymously with forms throughout Levine's *Forms* (2015; 1, 40, 47, 64). The force that inheres in forms, or designs, or techniques, lies in their affordances, hence their latent "potential uses or actions" (6). Through these affordances, forms have their own causal efficacy on both the material elements that constitute them, but also on other forms through form-to-form interactions (Levine 2006b, 103). The form 'enclosure,' that for instance affords inclusion and exclusion (6), has real effects on both prisoners – their space of movement is severely limited – and on non-incarcerated people – the form's affordances might inspire fear and obedience in people.

Second, forms *afford portability* (5). This emphasises that a form organising one particular context, can always be *ported*, that is transferred, into different contexts. Forms are portable across both time and space, and across domains. For spatiotemporal portability, Levine refers to Foucault's discussion of the daily timetable, "which begins by organizing life in the medieval monastery, but then gets picked up by the modern prison, factory, and school" (5) – if a technique works well at one moment, it could be reappropriated at another moment and location.

Forms also afford portability across domains. Some forms might engender powerful organisations in both an aesthetic, and a political domain – an embrace of totality in aesthetics can, for example, be thought to lead to "an embrace of totality in political communities" (5). There are also countless examples of forms travelling from the biological domain into the aesthetic or political domains; for example, the form of termite hills, which afford an excellent cooling of the relatively large structure, is portable into the domain of human architecture (aesthetics), affording low-cost cooling in skyscrapers instead (Prabhakar & Narkhede 2021).

Importantly, the fact that forms always afford portability must mean that forms always remain generic. A wholly individual, particular, form – the form of me, Coen Pompstra, for instance – cannot exist: such a form by definition only pertains to me, and is hence not portable to other individuals. Of course, one could argue that by my movements through space, and existence through time, my individual form could still be interpreted as spatiotemporally portable. Such an interpretation of portability, however, does not resonate with Levine's usage of the term: when she speaks of spatiotemporal portability, she speaks of a technique that works so well at one moment in time and space, that the general form that organised this technique is be ported to other moments in time and space – as with the timetable. Forms, hence, are never individual.

To summarise, Levine proposes that forms organise reality. Through the affordances of matter itself the emergence of certain forms is caused. In a downward movement, these forms influence their constituent materiality; but they also interact with other forms – all striving to

impose their own order through their affordances, on material reality. This show of the forceful nature of forms is complemented by formal portability, which dictates that forms are generalities that can travel both across time and space, and across different domains. With this information thus assembled, we have gathered to conceptual tools together to construct a Levinean concept of individuation.

Between matter and form

As we saw above, matter and form are inextricable, the one does not exist without the other. We also saw that Levine captures individuality through material and formal affordances. These two facts point at the following, provisional, description of Levinean individuation: it is the dynamic whereby the affordances of several materialities engender a form, which then proceeds to start directing its constitutive materialities through its proper affordances. The individual, then, is the relatively stable product of such a dynamic and it is marked as this particular individual by the *affordances* endowed upon it by its form.

This image of Levine's individuation and marking of the individual needs to be nuanced in terms of both organising forms and constituting matter.

To start with the organising forms, we need to re-emphasise that the individual is marked by its *affordances*, and not its *forms*. It is impossible to mark the individual by its form: a fork is not marked as this particular fork by being organised by the fork-form. The reason for this is twofold: on the one hand, as we contended above, forms always remain generic and cannot become individual, as they always afford portability. The individual fork, therefore, cannot be marked as this particular individual by its fork-form, because this form applies to all forks in existence: forms are marks of species, not of individuals. The individual fork can, however, be marked by the *affordances* endowed on it by the fork-form.

The second reason why the individual cannot be marked by its form, is that matter-form dynamics always realise *multiple forms*. Taking up the fork again, its specific fork-form and its accompanying affordances of stabbing and scooping are realised by a constellation of steel elements. Remembering that materiality is determinant in the matter-form dynamic (9), however, there is nothing that prevents the steel constellation from generating *other* individual forms. Indeed, the steel realises the form of a fork, which affords the subsequent individual with the affordances belonging to forks; but the steel just as easily realises the form of a conductor, which affords very different actions; or maybe the steel's matter-form dynamic could yield the form of fuel for a steel-recycling furnace, a form which again has totally different affordances than the fork or the conductor. Levine's process of individuation – that is, the matter-form dynamic – thus never

realises only one proper form and its accompanying affordances: every individuation yields several proper forms and affordances.

On the formal side of the individual, hence, we have to conclude that the individual is never marked by the form. The double reason for this is that there are always multiple forms realised in one process of individuation, and that each of these forms remains general. The individual is, hence, marked not by the forms, but by the *affordances endowed on it* by the forms.

Materially, a nuance must be introduced too. Individuals cannot be marked by the affordances of only the forms that organise them, they are also marked by the affordances endowed upon them from the material side of the individuation process. Indeed, a fork affords stabbing and scooping, but it just as well affords those things endowed on it by its material side: "strength, smoothness, hardness, and durability" (Levine 2015, 6), that is, the affordances of the steel is made up of. Or to give a different example: the individual prison cell cannot only be marked by the affordances endowed upon it by its different forms, like the inclusion/exclusion affordance from the enclosure-form, it is also marked by the affordances of the material components that make it up: it affords being in a particular place in space, it affords cold walls, etc.

Concluding, an individual is a relatively stable product of a matter-form dynamic generating multiple proper forms. The individual is marked by the combined affordances of these forms. It is, moreover, marked by the combined affordances of its matter. The individual, steel fork is hence marked by the steel's affording smoothness and durability, but also by its capacity to stab and scoop, the capacity to conduct electricity, and to become part of new steel constellations when heated enough. It is this sense of individuation and marking of the individual that is tested later in the article.

DeLanda's Diagrams

According to DeLanda, reality consists of individual entities he calls 'assemblages.' In the following I first the properties of assemblages – what are they, really? – and then I discuss their capacities – what can they do? By answering these two questions, it becomes possible to understand how DeLanda conceives of individuation and, finally, how he marks the individual.

Nested Leibnizean ponds

According to DeLanda, everything that exists – terraces, political systems, intimate discussions – either is an assemblage, or springs forth from an assemblage. The crucial features of assemblages are linked to the concepts of emergence, and exteriority (2016, 10).

Most basically, assemblages are wholes, made up of parts. These parts "are not uniform either in nature or in origin," that is, the parts of an assemblage are heterogeneous (2). An assemblage hence does not consist out of itself, it is realised by its parts: a fork does not consist of forks, but of fixed iron and carbon atoms. This heterogeneity does not confine itself to parts of empirical kinds – as in a table that might have metal as well as wooden parts. Importantly, it also refers to a heterogeneity of ontological kinds. In this section we discuss two of these ontological kinds: intensive and extensive components.

Intensity in DeLanda is the opposite of extensity; that which is extensive has properties whose values can be added together (the mass of the table is the sum of the masses of its wooden and metal components). Intensive parts are properties that cannot be added in this way (the temperature of a table is of course not the sum of the temperature of its wooden parts added to the temperature of its metal parts, because that would result in the absurd situation where all entities are significantly hotter than their parts) (76). Temperature, pressure, but also desire, are all examples of such intensive properties. The extensive and the intensive are two separate ontological kinds that nevertheless feature in each assemblage, according to DeLanda (2005, 86).

Second, by establishing more or less durable relations between these heterogeneous components, "the assemblage actively links these parts together" (DeLanda 2016, 2). In a movement by which the whole influences the parts – downward causation – the terrace, for example, *actively* links components as heterogeneous as extensive chairs, ashtrays, personnel, intensive temperatures, and degrees of client impatience together. The activity of the linkage hints at the first crucial concept of *emergence*.

The difference between a random agglomeration of parts and an assemblage is the presence of *emergent properties*. These are properties of the whole, produced by interactions between the parts, but irreducible to the properties of these parts themselves: the surface tension of water, for instance, cannot be reduced to the properties of individual water molecules (9). Or take the ambiance of a terrace, irreducible to the individual chairs, or even the individual people, populating the space. In addition to being irreducible, surface tension and terrace ambience are causally efficacious: the surface tension of water allows it to resist external force in a way that the individual water molecules could not; and more familiar, the ambiance of the terrace attracts people passing by to sit down at it, or to be repelled from it.

A given we return to when we discuss individuation later this chapter, is that every assemblage is historically unique (13). As such, DeLanda considers every assemblage "to have a fully contingent historical identity, and each of them is therefore an *individual entity*" (19). Individuality, hence, does not solely refer to persons, but to every assemblage that exists. The

individuality of these emergent assemblages is important as it points at the next crucial term: exteriority.

Importantly, the components of any assemblage are individual assemblages themselves. DeLanda's picture of reality hence is one of nested assemblages, Leibnizian ponds full of fish in which the fish themselves are further ponds full of fish (Leibniz 1898, 67-68). As every component is an assemblage, it is also a historically unique individual with its proper emergent properties. And although these component-assemblages partake in the larger whole-assemblage, "the parts retain their autonomy, so that they can be detached from one whole and plugged into another one" (10).

This autonomy points at the fact that assemblages cannot be defined only in terms of the relations they maintain with other assemblages: the relations maintained by assemblages are always *exterior* to their identity. Such relations DeLanda fittingly calls *relations of exteriority*.

Now a more detailed picture of assemblages unfolds: they are emergent, individual wholes, engendered from the relations of exteriority between their heterogeneous – that is, intensive and extensive – parts which are, in turn, individual, emergent assemblages in their own right. This does not describe assemblages in their totality, however. The next section deals with their indispensable last aspect: the diagram.

Virtual phases

Assemblages according to DeLanda have both extensive and intensive components, these describe the assemblage's *properties*. An entity for DeLanda, however, is always more than just its properties. It is also always defined by what it can do, its *dispositions*. A car that has just been turned off, for instance, has a set of extensive and intensive properties – it might be red, has four wheels, the engine might still be hot, etc. – but listing all these properties misses one essential aspect of the car: it can be turned on and drive! It is this *capacity* to do certain things that DeLanda describes with his concept of the diagram.

In physics, a phase diagram describes the phase-changes a material undergoes as a function of changes in certain variables. It for instance describes the thresholds at which water goes from a fluid to a block of ice, or to its gaseous state according to changes in temperature and pressure. A phase diagram therefore describes a material's possible states and significant changes between them – in short, it describes the dispositions of an entity. DeLanda maintains that every assemblage is endowed with such a diagram (108). Every assemblage therefore has, in addition to extensive properties such as size and intensive properties such as temperature, a set of dispositions that DeLanda calls 'capacities.'

The capacities described in the diagram are *virtual*. This means that they are real without currently being *actual*. Put in different terms, the diagram describes the possibility space an assemblage has. I currently have an *actual* weight (an extensive property) by which I exercise pressure on the chair that I am sitting on, and I currently have *actual* desires (an intensive property) that make me write this text rather than do something else. I also have the capacity to write Dutch, but this property is *virtual* in that it does not currently manifest to make a difference in the world in the way that my extensive weight and intensive desire do (109).

Summarising, every assemblage has a set of dispositions, described by its individual diagram. This diagram has a virtual ontological status – which means that it is real, without being incarnated into actual time and space (DeLanda 2011, 188). Having thus concluded that assemblages are individuals with extensive, intensive, and virtual ('diagrammic') components, we can now understand how new assemblages are made or configured.

Individuation: gradients and diagrams

The temporal process describing the genesis of new individual assemblages and of significant changes in existing assemblages DeLanda calls individuation (140). In individuation, something pre-individual gives rise to a new, individual assemblage. Following Deleuze's theory of individuation in *Method of Dramatisation* (2002, 131), DeLanda considers this pre-individual 'something' to be a combination of an intensive gradient, and a diagram (148). Important to note here is that DeLanda's theory is an ontology, not a phenomenology: he describes the emergence of reality, not of our *perceptions of* reality.

An 'intensive gradient' can be any entity that differs internally in an intensive way. A fridge, for instance, which is cold on the inside and hot on the outside creates an intensive gradient. A star whose core is hotter than its surface also forms an intensive gradient (DeLanda 2016, 145). Important for DeLanda is that these "*intensive differences are productive*" (2005, 81). They produce, as in the example of star cores, individual atoms (DeLanda 2016, 148). Or take the intensive differences of an egg, which in the end produce the embryo (Deleuze 2002, 135). Next to the productive, intensive gradient, however, something is needed to *guide* individuation as well.

That which guides individuation is the virtual diagram (DeLanda 2016, 146). As we saw in the foregoing, diagrams are individual possibility spaces. These possibility spaces guide the creative potential of the intensive gradients. To retake the example of atoms, atoms are created in the intensive gradients of star cores, but their creation is guided by the virtual "*space of possible atom species*" (145). Without going into the theoretical physics behind this idea (145-47), this virtual space describes "the set of possible orbital forms" the electrons around an atom core can take on (147).

The productive capacities of an assemblage's intensive gradient are hence curbed or canalised by the diagram.

In conclusion, DeLanda's describes individuation as follows: a given assemblage contains a productive, intensive gradient. New (configurations of) individuals are produced by this gradient, but only in accordance with a virtual possibility space that dictates which individuals are possible. Individual assemblages with their extensive, intensive, and virtual components, are hence only thinkable in DeLanda's philosophy as posterior to a process of individuation. Differently put: individuation proceeds the individual and its manifestations.

At this point, only one part of DeLanda's theory remains unexamined: what he calls the plane of consistency. In the next and final section, the plane of consistency and its ontological consequences for DeLanda's mark of the individual are explored.

Here comes everything

The concept of 'plane of consistency' takes on a very special role in DeLanda's ontology, as it is logically anterior to processes of individuation. According to DeLanda, in the end, all assemblages and their various components are "progressive differentiation[s]" of the plane of consistency (124).

The plane of consistency is the virtual, universal possibility space of reality (121). In total virtuality, it dictates what is possible and impossible. It does this by differentiating into diagrams. Avoiding the technical, mathematical formulations of the plane DeLanda provides, one could very roughly compare the plane of consistency with white light, which, through the intervention of a prism, can be differentiated into a gradient of red-yellow-green-blue-purple. Importantly, it is impossible to make the white light differentiate into a gradient of yellow-purple-red-blue-green. In this same way, the plane of consistency differentiates into a gradient of diagrams (124), but only in a gradient that fits within the possibility space of the plane – that is, the white light-prism installation (126). It is this logical movement of differentiation from the virtual plane of consistency that creates all the diagrams in existence.

Now, individuation, as we saw in the previous section, is the process whereby individual diagrams reign over the productive powers of intensive gradients. Conditional for every process of individuation, hence, is that there are individual diagrams to be ruled by in the first place. These individual diagrams are created in the differentiation of the plane of consistency, which must, hence, be ontologically anterior to any process of individuation. To combine these insights with those of the previous section: individuals presuppose processes of individuation, and processes of individuation presuppose a differentiated plane of consistency.

With this order of ontological anteriority established, we are finally able to conclude what is DeLanda's mark of the individual. Once again, DeLanda's individual is an assemblage, made up of virtual, intensive, and extensive components. At first, it might seem most attractive to mark the individual as this threefold whole, this, however, cannot be true: the only intensive and extensive components an assemblage has are those rendered possible by the diagram. In a sense, then, the intensive and extensive aspects of any assemblage are already implied in its diagram, which makes taking them up into the mark of the individual superfluous. Significantly, also, the search for a mark of the individual cannot go 'further back' into ontological priority either, as the individual diagram is the first moment that individuality emerges in DeLanda's theory.

The mark of the individual for DeLanda hence is to be found in the individual diagrams. A car is, hence, not marked by its specific length, colour, or temperature, it is marked as an individual through the wide array of dispositions it possesses. It is this mark of the individual, preceded by a process of individuation in which a virtual diagram directed the productive capacities of an intensive gradient, that will now be compared to Levine's process of individuation.

Restaurants and Dissolving Marks

I began this article by signalling a problem within the NM ontological framework. This framework I defined in the introduction as combining two theses: first, reality exists out of *individual*, material entities and the immaterial entities realised by them; second, these individuals are primarily characterised by their agency, which, however, only plays out on a confederate scale. The problem created by this framework was the following: where can that which is particular only to the individual – the mark of the individual – be found?

Two different solutions to this problem by two philosophers associated with NM have now been discussed. Levine puts forward a theory of individuation that revolves around a matter-form dynamic. Here matter must be understood as any set of elements – be they corporeal or non-corporeal – endowed with affordances, which by their interrelations realise certain proper forms. These forms have their own affordances, which allow them to influence the matter that realised them and act outwards to other matter-form dynamisms. Subsequently, the individual in Levine is the relatively stable product of such a dynamic and is marked as individual by the combined affordances of all its proper forms and its matter.

DeLanda's process of individuation combines the productive power of the intensive gradients existing in assemblages, and the canalisation of this power by individual, virtual diagrams. These individual diagrams, which enjoy ontological priority over the other intensive and extensive components of assemblages, we consider as DeLanda's marks of the individual.

This section compares both theories in terms of their explanatory power. To avoid this comparison getting lost in abstraction, it is made in reference to a busy restaurant in the university quarter of a French city. In the following I first give a short description of this restaurant, after which both perspectives on its individuality are discussed and then compared. The section concludes by deducing from this comparison several recommendations for further NM theorisation.

Marking French restaurants

The hypothetical restaurant under inspection here is called *L'Écrivain*, a playful, French-friendly translation of the last name of the family that runs the enterprise: Schreiber. Situated close to city's university, its clientele on the one hand consists of students and professors; the other part of it being comprised of an older group of regulars living in the city quarter.

L'Écrivain has been run by the Schreiber family for at least four generations, endowing it with the air of a true 'family enterprise.' The trust in the restaurant created by this image is further increased by its decennia long efforts to always serve quality food by a friendly team of waiters.

In the past few years though, taxes on the products sold have gone up, just like the wages of the personnel. Moreover, due to frequent student protests at the university, the institution often decides to close its library, thereby chasing a big part of *L'Écrivain*'s clientele to other parts of the city that do allow for studying. These mounting pressures, further exacerbated by the occasional family feud, drive the restaurant to rethink its business model…

Starting off with Levine's theory of individuation, *L'Écrivain* is understood as a product of a dynamic between all kinds of elements interacting and thereby creating a set of proper forms that afford an influence over the elements. The combined affordances of these elements and forms finally mark *L'Écrivain* as this particular individual.

The most important of these forms must be the form 'restaurant,' which emerges from the interactions between the location's spatial layout, its rhythmic habits – a client orders something, a waiter transfers the order to the kitchen, the kitchen makes the order, the client is served – and the municipality's records of the enterprise. This form affords influencing its own elements: the spatial layout for example is made to conform to walking routs that are easy for personnel. The form affords external actions like 'feeding people,' or 'adding 'warmth' to a street.'

A second form realised by *L'Écrivain,* however, is that of a family enterprise. This form is generated by the family structures that the managing staff partake in and has several ways of influencing the elements that constitute it: perhaps it affords the exclusion of non-family members

to managerial positions in the company, or it affords clientelism in the recruitment policy. Its affordances also direct externally, like the affordance to create an image of trustworthiness, or the affordance to catalyse business problems with family problems.

We could imagine more forms individuating *L'Écrivain* – perhaps the form of 'student gathering point' – but the idea is clear: restaurant and family enterprise are two of the forms of *L'Écrivain*.

Lastly, the mark of the individual for Levine consists of the affordances of both the forms, and the material elements that constitute these forms – the terrace table's affording a seating area, for instance. Levinean individuation hence marks the individual *Écrivain* as an individual that affords seating areas, that feeds people, that adds warmth to a street, that has a trustworthy family image, that lets family feuds enter business decisions.

For DeLanda, *L'Écrivain* is an individual assemblage, made up of the interactions of all sorts of component assemblages. One of these components nested in *L'Écrivain*, for instance, is the terrace with its ambiance. But there are also the regular customers, the physical building and its furniture, the regulations for the personnel set up by the Schreiber family, etc. These components and their interactions all establish *L'Écrivain* with its emergent properties.

These properties are the product of a process of individuation commenced by one or a combination of intensive gradients. For these we could, for instance, point at the desires of members of the Schreiber family to remain in the restaurant business; the profitability of the restaurant; or even the degree to which the neighbourhood wants the restaurant to stay. Important, however, is that the process whereby *L'Écrivain* individuated is always led by a diagram belonging to the assemblage itself.

It is according to the possibilities inscribed into this individual *L'Écrivain*-diagram that the assemblage individuates in a certain way. When the financial problems combined with the family discussions at any point become too great, this diagram describes the possible ways it can become: the restaurant, for instance, could simply discontinue its operations – ending the family business entirely. Or it could neglect the quality of the food and concentrate on selling cheap drinks, thereby catering more to the student clientele. Any choice that is eventually made, with the intensive and extensive properties that follow from it, is thereby an actualisation of the diagram of *L'Écrivain*.

It is because DeLanda attributes such an ontological priority to the diagram that this article considers the diagram to be DeLanda's final mark of the individual. It is through its proper diagram that *L'Écrivain* marks itself as an individual.

Dissolving marks

Before diving into a critique and comparison of these interpretations of *L'Écrivain*'s individuality, it is important to mention that both Levine's and DeLanda's theories of individuation are an improvement on the typical NM framework sketched in this article. Levine's affordances and DeLanda's diagrams manage to mark the individual, something that was not possible given the framework.

Both do this by reducing the extension of the second thesis of NM: according to Levine and DeLanda, although agency might be confederate, the *potential to act* is characteristic of the individual. Combined with her matter-form dynamic, Levine's affordances describe the individual in terms of those actions it *affords*, these are dispositions of the individual. Marking his individuals through their emergent capacities, DeLanda does something similar: some of the actions happening in an agentic confederacy have their origin in the diagram of the emergent individual, which remains nested in the broader confederacy.

As is clear from the discussion of *L'Écrivain*, moreover, both theories do well in terms of their explanatory power. Both use a similar model of emergent causality to interpret how the individual restaurant relates to its constitutive components. This allows both to appreciate how changes in these constituents shape the way the individual is marked: a change in the material elements of Levine's matter-form dynamic makes for different forms being realised, which then differently determines the affordances marking the individual. For DeLanda a change in the components of an assemblage – especially in the intensive components – modifies the individuation process that takes place, which results in a different individual with a different diagram. In this sense, both theories improve the explanatory power of the NM framework they build upon.

Though these are serious improvements, they are not wholly unproblematic. The reason for this is that, despite their efforts to erect a robust concept of individuality, both marks of the individual in the end dissolve into a broader totality.

Levine's mark of the individual, the series of affordances, is founded in either the constitutive elements, or in the emergent, forms realised by these elements. Neither foundation, however, can be deemed capable of protecting the mark against dissolution. Starting off with the constitutive elements, there is no criterion to demarcate which elements partake in the emergence of a form. It is therefore impossible to strictly delineate which elements' affordances should figure in the affordance summation that marks the individual. Let us clarify by taking *L'Écrivain* as an example.

It seems clear that for the proper form of 'restaurant' to emerge, a kitchen and personnel are necessary constitutive elements. These affordances should thus be attributed to the individual *L'Écrivain*. This same clarity does not apply, however, to the 'student clientele'-element, for instance: the restaurant would still be a restaurant with only the older, regular's clientele. Still less clear is the addition made to the restaurant form by the university library. Although this institution is not even physically in the restaurant, it carries a significant impact on the capacity of the restaurant to remain a restaurant – which is clear from the effects its closure has on *L'Écrivain*'s profitability. As it is unclear which elements essentially partake in generating the individual's forms, deducing a mark of the individual from these elements' affordances risks either an inflation, or a deflation of the mark. Elemental affordances hence are unfit for founding the individual.

The other carrier of the mark are the forms. By being formed by the form 'restaurant' and 'family business,' *L'Écrivain* has certain affordances that mark it as an individual. Problematically, however, because forms are always portable, they cannot become so particular as to belong solely to one individual – this would negate the requisite of portability. Forms, hence, are always generic: *L'Écrivain* does not have a proper '*L'Écrivain*'-form, it only has generic forms such as restaurant.

Consequently, the individual indeed is marked by the affordances of a series of forms. But given the fact that these forms always remain generic – i.e. applicable to a range of other individuals – this marked individual only exists as an intersection between these generalities. Concerning the proper forms as carriers of the mark of the individual, hence, we must conclude that the individual is little more than a relation between general forms. Levine's forms therefore do little to help us overcome NM's problem of deemphasising entities "in favor of their couplings and decouplings" (Bogost 2012, 7).

Levine's mark of the individual hence dissolves in both its foundations. It is helpful to reformulate this problem in terms of individuation. Individuation, as will be recalled, is that process by which an individual is established from pre-individual factors. In Levine's theory, these pre-individual factors are the constitutive elements and the proper forms, as the interaction between these factors – the matter-form dynamic – is the Levine's process of individuation.

What goes wrong in this theory of individuation is that that which marks the individual – the affordances – is founded in the *pre-individual* factors of individuation, and not in the newly estblished individual itself. *L'Écrivain* as an individual does not do any work in marking itself: there is no concept that refers solely to *L'Écrivain* in which the affordances could find a proper foundation. As a result, the theory is necessitated to refer to the factors of individuation that are ontologically prior to the individual – the terrace chairs, the form of the restaurant, the university – to found the mark. These factors, however, are not fit for such a task, precisely because of their

pre-individuality: the material elements are pre-individual, hence the difficulty in determining which of them essentially belongs to the individual; the proper forms are pre-individual, hence their generality and subsequent resistence to becoming particular.

Concluding, Levine's mark of the individual dissolves in both of its foundations. This dissolving can be understood as resulting from the mark being misplaced: instead of the affordances finding a firm foundation in a Levinean concept of the individual, the affordances are founded in pre-individual factors of individuation. As that which is pre-individual cannot stabilise the individual, Levine's mark of the individual dissolves.

At first glance, DeLanda's theory overcomes the problem Levine deals with. DeLanda does have concepts that pertain only to the individual, the assemblage, and his mark of the individual is founded in this concept. In fact, the individuality of the assemblage as a whole results from the individuality of the diagram. Upon further inspection, however, the diagram's individuality is far from evident.

The reason for this is that the individual diagrams essentially are smaller, more resolute possibility spaces within the broad universal possibilty space that is the plane of consistency. To retake the previously used metaphor: when the white light enters the prism, the prism simply sorts the white light according to the many different wave lenghts it possesses, resulting in the coloured gradient we see. The coloured light is the white light, just made more resolute by being pulled apart in the refraction of the prism. The diagrams are just like this: starting as implicated in one plane of consistency, they are specified into individual diagrams. Indeed, they can be interpreted as discontinuous, pulled apart versions of the continuous plane of consistency (DeLanda 2016, 117). In this sense of being implicated, the individuals as theorised by DeLanda therefore – just like with Levine – dissolve into a broader whole: the whole of the plane of consistency.

Next to acting as the 'dissolvant' of the individual diagrams, the plane of consistency is problematic for another reason. By introducing the plane of consistency DeLanda breaks with the first thesis of NM: that reality exists solely out of individual, material entities and the immaterial entities they realise. The assemblages, indeed, comply with this thesis: they are either material, like terrace tables and ashtrays, or they are materially realised immaterial entites, like the terrace's 'ambience.' The plane of consistency, however, is of an ontologically different kind entirely (DeLanda 2005, 86): it cannot be material or immaterial, and it cannot be an individual.

As the plane is fully virtual, it has no actual existence in space and time (DeLanda 2016, 109). It therefore cannot be material or immaterial, as both of these modes of being require time and space to play out in – a material table without space cannot exist, the terrace ambience needs

time to exist. The plane is also pre-individual, as it ontologically precedes individuation. By definition, therefore, it cannot be an individual.

Of course, breaking with the first thesis is not problematic in and of itself. It does become problematic, however, when this thesis is explicitly affirmed by DeLanda at other points in his writing: "a materialist philosopher can only be a realist about *immanent* entities, that is, entities that may not subsist without some connection to a material or energetic substratum" (139). In its virtual immateriality and pre-individuality, the plane of consistency does not fall into the category of entities that DeLanda can be a realist about.

In addition to the paradoxical place the plane takes on in DeLanda's realism, another problem quickly reveals itself. As is argued by Kleinherenbrink (2020), DeLanda introduces the plane of consistency to explain similitude between entities – all pigs with their individual diagrams are individuated from a more general pig-diagram that determines what a pig is and is not (294; DeLanda 2016, 142). When the capacities of an assemblage are just theorised as emerging from the interactions between components of the assemblage, however, this similarity can already be explained: "[s]imilarity between assemblages simply arises when the same assemblage repeatedly exercises its powers on a specific group of entities, much like it just takes a single army to train numerous similar soldiers" (Kleinherenbrink 2020, 294). The plane of consistency is not needed to fulfil the goal for which DeLanda created it in the first place.

Within DeLanda's philosophical framework, then, we encounter a similar problem as with Levine's: a great improvement is made in terms of explanatory power by arguing for a distinct mark of the individual, but then this improvement is cancelled out by the mark dissolving at another level of the theory. In Levine the mark of the individual dissolves in the pre-individual factors of individuation in which the mark is founded; in DeLanda the individual diagram reveals itself to be a specification of the overarching whole that is the plane of consistency, in the end reducing the diagram as a mark of the individual to something akin to a manifestation of the plane. Realising that both attempts fail at robustly marking the individual, what can be learned from them?

Onto a more explicative NM theory of individuation

Given the objective to establish a NM theory that on the one hand affirms both theses of NM, and on the other conceptualises a mark of the individual, three lessons might be learned from the foregoing. First, conceptualising relations of emergence, in the sense of emergent causation and downward causation, is an exceptionally powerful tool to theorise part-whole relations. It allows one to understand that wholes can be formed from interacting components, and that the newly

individuated whole can then go on influencing the components themselves. It also affords the conceptual space for the individuals to retain their individuality: wholes do not have to be totalising, that is, components do not have to dissolve in the whole they create. If NM theorists want to increase the explanatory power of their theories, explicitly discussing such relations of emergence seems indispensable.

Second, when we try to conceptualise a mark of the individual in such relations, it is important to situate this mark on the level of the individual itself, and not in the process of individuation that establishes the individual. This is the mistake made by Levine, who in the end fails to theorise a robust mark of the individual because those aspects that mark her individual – the affordances – remain tied to the *pre-individual* actors of individuation: the material elements and the forms. When these actors in the end reveal themselves in their pre-individuality – which is what happens when it becomes clear that the material elements are either too broad or too narrow to carry Levine's mark, and that the forms are too generic to carry it too – the result is an individual that dissolves in its process of individuation.

Third, when the mark of the individual is not situated in the pre-individual, but finally receives its own ontological footing – which is what DeLanda does by not marking the individual in his process of individuation but rather in the individual diagram – it is important to not let this ontological footing be in an entirely separate sphere of reality either. By marking the individual by its individual diagram, which upon further inspection shows itself as a specification of a larger whole, namely the plane of consistency, the individual dissolves again. This problem is only exacerbated when we consider the curious role taken on by the plane of consistency: because of its incompatibility with the first thesis of NM, which DeLanda at other moments explicitly affirms, or its superfluity when it comes to explaining similitude, it can hardly be deemed an attractive ontological foundation for anything.

Conclusion

In this article I have investigated Levine's and DeLanda's theorisations of individuation and their ways of marking the individual. For Levine, the process of individuation is a dynamic between constitutive material elements and emergent proper forms. This dynamic results in the accumulation of a series of elemental and formal affordances, the totality of which I designate as Levine's mark of the individual. For DeLanda, the process of individuation consists of an intensive gradient whose productivity is curbed by a virtual diagram. The individual assemblage that is thereby created is marked by the individual, virtual diagram that describes its possibility space.

Both theories prove to be great improvements on the NM framework. This framework combines a first thesis, that reality comprises only individual material entities and the immaterial entities realised they realise, with a second thesis, that the primary characteristic of these individual is their partaking in wider agentic confederations. This framework cannot mark the individual, as its agency always dissolves in the broader agentic distribution it is part of. Both Levine and DeLanda therefore propose an ontology that improves upon the NM framework's explanatory power when it comes to marking the individual.

Nevertheless, in their solutions the same problem of a dissolving individual resurfaces. Levine's series of affordances is not founded in product of the process of individuation – the individual – but in the factors of individuation – the elements and forms. As is clear from the indiscernibility of the elements and the generality of the forms, these factors are pre-individual and hence unfit to found a mark of the individual: the individual dissolves again. DeLanda avoids this problem of situating the mark in the pre-individual, but in the end succumbs to the same dissolving individuality: the individual diagram marking the assemblage reveals itself to be a specification of a continuous plane of consistency. The diagram hence dissolves in this plane.

The three main lessons that can finally be drawn from this article's investigation into Levine's and DeLanda's theorisations of the mark of the individual are as follows. NM theorists should 1) keep theorising relations of emergence to capture the complexities of our nested reality. In addition, they should 2) refrain from founding their marks of the individual in pre-individual factors, rather creating concepts that refer to only product of individuation, the individual, instead. Finally, 3) one should be very careful when postulating all-encompassing virtual fields to mark the individual, lest this mark should become a mere manifestation of this virtuality.

With these recommendations, I hope that this inquiry into individuality has succeeded in driving NM into a direction that affirms the individuality of entities. Although we might in the end come to agree with Deleuze when he says that '[n]othing is harder to define than the individual,' the least we can do is try our best.

Saving the Individual

Research Proposal to reinstall the individual back into New Materialism

Summary of the theme and aim of the project

Increasing awareness of the ecological disaster unfolding around us has raised a host of new questions across the sciences. In philosophy, one particularly important question that is being asked revolves around what should be the most *fundamental* conceptual frameworks used to think about our planet, its material and organic elements, and the ways these relate to each other. In this debate, 'New Materialism' is one of the most prominent genres.

In the last two decades, New Materialist scholarship has produced many conceptual frameworks describing the ways in which all kinds of entities – rivers, political systems, humans, ecosystems, microbes – are interconnected and interdependent. A broadly recognised problem, however, is that New Materialism puts so much stress on the relationality of entities that there is no longer any conceptual ground to discern *individuals*. This problem has spurred several New Materialist scholars to propose conceptual tools to fill this gap.

This project compares these new theories of individuality, investigating their strengths and weaknesses. In addition, recognising that New Materialist frameworks are far from monolithic, this investigation examines which general variants of interrelatedness are proposed in the scholarship, and which problems for individuality each variant poses.

Description of the proposed research;

With the advent of global warming and its adjacent calamities – the *Anthropocene* – science in general is asked to find solutions to help out humanity. In the branch of science we call humanities, more specifically, there exists a broad consensus that global warming calls into question our most general conceptual frameworks for understanding the world. Postcolonial historian Dipesh Chakrabarty, for instance, argues that "by bringing the geological [scale of climate change] into the everyday", the Anthropocene disturbs our foundational belief that "the Earth provides a stable ground on which we project our political purposes" (2018, 31). It is therefore paramount, as argued by many scholars who argue along similar lines, to reassess our fundamental concepts for the world and, where necessary, change them (Ghosh 2016, 82; John 2018; Kohn 2013; Morton 2012; Trexler 2015, 13-14; Ustler 2009, 173).

Naturally, this same reanalysis of the foundational concepts used to understand the world around us has been taking place in philosophy. In academic philosophy, this is most clearly visible in the rapidly growing genre of 'New Materialism.' For New Materialism, the analysis stimulated by global warming "means returning to the most fundamental questions about the nature of matter and the place of embodied humans within a material world" (Coole & Frost 2010, 3).

New Materialism sets itself two main tasks. The first of these is to deemphasise the importance of discourse in shaping reality. Over the course of the 20th century, New Materialists argue, discursive schools of thought have greatly overstated the role of language and discourse in understanding the construction of reality (Bennett 2010, 17; Coole & Frost 2010, 3; Morton 2016, 26). Because of their overemphasis on discourse, the discursive philosophies inherited from the 20th century do not do justice to this material reality ontologies (Dolphijn & Van der Tuin 2012, 91). In this spirit, Levi Bryant states that "this reduction to the cultural and discursive […] has had the effect of rendering *physical* agencies *invisible*" (2014, 2).

Related to this first task is New Materialism's second task: a refusal of anthropocentrism. Anthropocentrism is the idea, often attributed to Immanuel Kant (Morton 2016, 17), that there is an abyss between the human and the non-human: some qualities like consciousness and agency are inherently human, others are not (Bennett 2010, xvi). Timothy Morton for instances rejects anthropocentrism when he says that "there is no intrinsic superiority of human ways of accessing the thing" (2016, 18). Attributing to humanity a privileged place is, according to many New Materialists, what allows humanity to reduce the world around it to an object to be used and consumed (Bennett 2010, ix; Morton 2016, 24). As is argued by Bryant, truly thinking the impacts of climate change "requires us to think how we are both embedded in a broader natural world and how non-human things have power and efficacy of their own" (2014, 4).

New Materialist scholars do more than just criticise, moreover. They offer their own theories too. In her *Vibrant Matter* (2010), for instance, Jane Bennett greatly widens the extension of terms like 'vitality' and 'agency' to help "reshape the [human] self and its interests" away from anthropocentrism and towards a more environmentally sound attitude (Bennett 2010, 122). Manuel DeLanda's boasts the anti-anthropocentric idea that all entities, even tectonic plates (DeLanda 2016, 24), are expressive – a term usually only reserved for humans. All entities, namely, are made up of "those [parts] playing a material role and those playing an expressive one" (74). A third example is Levi Bryant, who in his *Onto-Cartography* (2014) proposes a post-humanist framework that synthesises typically human, discursive structures with typically non-human, materialist ecological theories: "we need to overcome the bias of human exceptionalism we find

in our social and political thought, so as to take into account the manner in which human social assemblages are embedded in a broader ecology" (Bryant 2014, 286).

As is often pointed out, the New Materialist scholarship is no unified whole (Coole & Frost 2010, 2). Despite their internal differences, however, a broad range of scholars criticises discursivity and anthropocentrism by offering alternative theories according to which alle entities have so-called 'agency,' that is, the capacity to make new things happen out of themselves (Bennett 2010, 31-32; DeLanda 2011, 188; Levine 2015, 6; Bryant 2014, 40; Harman 2016, 6). A well-known example of this is Bennett, who wants "to highlight what is typically cast in the shadow: the material agency or effectivity of nonhuman or not-quite-human things" (2010, ix). The list goes on with Graham Harman, who states that "objects have "agency," meaning that they are important when they are involved in some sort of action" (2016, 5). Another example of this is DeLanda, who as early as 1992 attributes an expressive agency to all matter, which according to him "can "express" itself in complex and creative ways, and our awareness of this must be incorporated into any future materialist philosophy" (133).

Significantly, however, this widely attributed agency is not theorised as belonging to individual entities, but to *groups of entities*: the agency, hence, is "distributed" or "confederate" (Latour 2005, 50; Bennett 2010, 23). We see this very explicitly said by Bennett, who rejects the idea that it was her authorial agency that wrote her book *Vibrant Matter*, but instead attributes it to a much larger confederacy of entities:

> [t]he sentences of this book also emerged from the confederate agency of many striving macro- and microactants: from "my" memories, intentions, contentions, intestinal bacteria, eyeglasses, and blood sugar, as well as from the plastic computer keyboard, the bird song from the open window, or the air or particulates in the room, to name only a few of the participants. (2010, 23)

Large parts of New Materialist scholarship hence can be seen to combine the idea that reality exists out of individual material entities with agency, with the idea that agency is always something that takes place in a larger agentic confederation. This creates a problem: where can that which is particular only to the individual – the 'mark of the individual' – be found? If reality consists of all sorts of material (and immaterial) entities, and if their main feature is a kind of agency that is *shared* and *distributed* between these individuals, then which *other* feature grounds their being *individuals*? Let us quickly unpack this problem.

Although it is their main feature, individuals clearly cannot be marked by their individual actions. This is because, as we saw before, it is always a broader, distributed field of agency that produces individual actions. When a waiter dresses a table, he cannot be marked by this action, as

it is produced within a confederacy of agents including the cutlery, the table, the reservation list, the clients and colleagues, etc.

It is, however, also impossible to mark the individual as the totality of its components. The reason for this is that NM theorises every one of these components as an individual in its own right, meaning the same problem that applied to the whole, now resurfaces in the components again. For example, maybe the waiter could be marked as the totality of its (organic) components: so his brain, legs, arms, etc. For all these components, however, holds that their primary characteristic, their actions, are the product of broader agentic confederations: the waiter's brain is the product of the agencies of genetic codes, the food he eats, and the habits he has. We are thus confronted with an infinite regression, as this same reasoning can be applied to any individual: each can always be considered as just another node in a web of agencies.

The tension between the theses hence does not resolve easily. Instead of individual entities with their individual actions, NM seems to confront us with one, pulsating blob of "matter-energy" (Bennett 2010, 122). This failure to discriminate between entities has not gone unnoticed in NM scholarship. Ian Bogost, for instance, notes this problem in Latour's Actor Network Theory: things remain in motion for more than they do at rest. As a result, entities are deemphasized in favor of their couplings and decouplings" (2012, 7). Harman underscores this same weakness in NM, which "lies in its inability to distinguish objects themselves from how they currently happen to be acting or otherwise manifesting in the world" (2016, 15). Similar further criticisms could be found in Rosa et al. (2021, 9) and Basile (2019, 10).

This tension implicated in large parts of New Materialist scholarship is what directs this research project. Its guiding hypotheses are that the tension is not irresolvable, and that conceptual tools that are already part of NM scholarship are a fruitful point of departure for resolving the tension.

For example, DeLanda's solution to the problem is situating the mark of the individual in the totality of *capacities* an entity has – Delanda calls this totality a *diagram* (DeLanda 2016, 108, 141). Individual entities can do certain things – my laptop can load Microsoft Word – and individual is marked by the diagram describing these capacities. Which of these capacities is actualised, however, depends also on the wider environment – my laptop only opens Word when it has enough power, when I click the icon, when it is not too hot or cold, etc (72-73).

In this way, DeLanda proposes a theory of individuality that on the one hand formulates a clear mark of the individual – the diagram of the entity – and on the other hand affirms the second thesis of NM by placing this marked individual in a wider agentic environment – the

environment being partly responsible for which capacities are actualised. Like this, DeLanda dissolves the tension that led to the mark of the individual being dissolved.

This problem of a dissolving mark of the individual, however, quickly resurfaces when DeLanda explains how the diagrams are generated. DeLanda postulates a new metaphysical actor to guide this genesis: the plane of consistency (109). Where the diagrams describe all the things an individual can do – it is an individual possibility space – the plane of consistency counts as a *universal possibility space* for all diagrams (121, 126). The universal possibility space gets sequentially differentiated into more and more particular diagrams, until the individual diagram is reached: for example, the organism-diagram, which describes the possibility space of all organisms, differentiates into the pig-diagram, describing the possibility space of all pigs, which then further differentiates into the individual diagrams of individual pigs.

Before differentiating into individual diagrams, therefore, the marks of DeLanda's individual already exist implicated in the plane of consistency (117). In this sense of being implicated, the marks of the individual as theorised by DeLanda again dissolve into a broader whole: the plane of consistency. DeLanda's conceptual tools to mark the individual, hence, are ultimately unsuccessful.

Despite this ineffectiveness, DeLanda's theory does point at a potential for the tension in NM ontology to be solved. In this PhD, then, I set myself the following goal: assessing different theories of individuation compatible with NM to help conceptualise a mark of the individual that does not dissolve into a broader whole.

The project proceeds along two lines of investigation. The first marks the individual through (rudimentary) forms of consciousness: an individual is this particular individual because it has a primordial form of subjectivity. This method of marking the individual takes its inspiration from authors like Deleuze, who in *Différence et Répétition* argues that every being, insofar as its becoming is influenced by a larger environment, has a primordial form of consciousness (Deleuze 1993, 327; Deleuze 2002, 131). Contemporary developments along this track are made by Ian Bogost and Levi Bryant, both of whom try to develop what kind of consciousness these individuals must have. They do this with the idea of 'Alien Phenomenology': a philosophical method that attempts to construct the life worlds of all sorts of entities, even trees, mobile phones, and cities, via the inputs it receives and the operations it performs upon it (Bogost 2012, 29; Bryant 2014, 54). Neither Deleuze, nor Bogost and Bryant, however, seem to be aware of the ontological potential of such a marking of the individual. It is this potential that the first line will investigate.

The second line I investigate in this project is inspired by Gilbert Simondon's philosophy of individuation. Proposing a theory of individuation that relies on differences between scales –

the difference of scale between molecular microstructure and molar energetic values, for instance – to constitute the individual, he avoids the problematic universalities as used, among others, by DeLanda. The implications of Simondon's theory for New Materialism are under-researched, however, often not extending further than his critique of hylomorphism (Bryant 2014, 36; DeLanda 2016, 142; Bennett 2010, 56), or his philosophy of technique, which "cannot be fully understood in isolation from his overall theory of qualitative [individuation]" (Massumi 2012, 22). Investigating the implications of Simondon's ontology for New Materialism and attempting to distill from it a mark of the individual is the goal of the second line of investigation.

Investigating these two ways to demarcate a mark of the individual within a NM ontology that affirms that reality exists out of individual material entities who enter into agentic confederations with one another – that is the aim of this PhD project. This goal can only be reached by differentiating between several sub-questions:

1) Which variants exist for New Materialism's focus on interrelationality, and what specific threats do they pose to the individual?
2) How can the Simondonian track towards marking the individual be conceptualised?
3) How do we concretely conceptualise the consciousness track of marking the individual?
    a) How does Deleuze use larval subjects to mark the individual?
    b) How do Bryant and Bogost use Alien Phenomenology to mark the individual?
    c) How do these approaches relate to each other, and what might be learned from them?

Although the aim of this PhD might seem like an overly technical, philosophical endeavour, far removed from societal relevance, this is far from the truth. As is often the case with ontologies, after the frameworks have been somewhat firmly established by philosophers, they are translated into scientifically useful methodologies. A prime example of this is Latour's Actor Network Theory, which begins as an ontology that urges researchers to take into account other-than-human actants, and which ends up being adapted as a research method by nearly all social sciences (Felski & Muecke 2020).

Acknowledging that NM is experiencing a similar translation effort (Fox & Alldred 2015; Thrope, Brice & Clark 2020; Andersson, Korp & Reinertsen 2020), there is a direct link between the quality of NM ontology and the quality of our empirical research. We expect our scientific institutions to aid us in combatting or enduring the Anthropocene. They can only answer to these high expectations if their methodological tools are as finely crafted as possible – that is, if the

ontological foundations of their tools are as robust and powerful as possible. This is where the societal relevance of this research project is situated.

Key words

New Materialism, Individuation, plane of consistency, larval subjects, mark of the individual, Gilles Deleuze, Manuel DeLanda, Gilbert Simondon, Levi Bryant, Ian Bogost.

Timetable

Time	**Question answered**	**Works consulted + Texts produced**
1st semester	Q1: Which variants exist of the interrelationality of entities exist in New Materialism, and what specific threats does each variant pose to the individual	Alberto Toscano's *The Theatre of Production: Philosophy and Individuaion between Kant and Deleuze* (2006). Coole & Frost's *New Materialisms: Ontology, Agency and Politics* (2010). Dolphijn & Van Der Tuin's *New Materialism: Interviews & Cartographies* (2012). At the end of this semester I ideally have been able to write a chapter/paper on the different variants of interrelationality in NM.
2nd semester	Q2: How can the Simondonian track of marking the individual be conceptualised?	Simondon's *L'individuation à la lumière des notions de forme et d'information* (2017). "Deux leçons sur l'animal et l'homme" (2020). *Du mode d'existence des objets techniques* (2012).
3rd semester	Q2: continued	At the end of the 3rd semester, I have written a chapter/paper that reflects on the specifically Simondonian way of marking the individual and urges a reintroduction of Simondon in the NM field.
4th semester	Q3a: How do we concretely conceptualise the consciousness track of marking the individual? - How does Deleuze use larval subjects to mark the individual?	Rereading parts of Deleuze's *Différence et Répétition* (1993) and *Logique du Sens* (1969). Julie van der Wielen's *Empirisme transcendantal et subjectivité : la notion de sujet dans les monographies de Deleuze sur Hume, Kant, Nietzsche et Bergson* (2023).
5th semester	Q3a: continued Q3b: How do we concretely conceptualise the consciousness track of marking the individual?	Bryant's *Onto-Cartography* (2014). Bryant's *The Democracy of Objects* (2011). Bogost's *Alien Phenomenology* (2012)

	- How do Bryant and Bogost use Alien Phenomenology to mark the individual?	In the middle of the 5th semester I have written a chapter on Deleuze's larval subjects as marks of the individual. At the end of the 5th semester I have written summaries of Bryant's and Bogost 's works.
6th semester	Q3b: continued Q3c: how do we concretely conceptualise the consciousness track of marking the individual? - How do these approaches relate to each other, and what might be learned from them?	Bryant's *Difference and Givenness* (2008). At the end of the 7th semester, I have finished writing the chapter on the Bryant's and Bogost's consciousness track. I have also finished writing the chapter that relates the Deleuze and Bryant/Bogost approaches to each other.
7th semester		I put all chapters together and compare the ways in which the Simonodonian track and consciousness track can be made to react against the different variants of New Materialist interrelationality.

Summary for non specialists

Faced with an ecological disaster the proportions of which remain shrouded in, for now, abstract statistical variables, humanity is pushed towards new conceptual regimes. The ecological crisis challenges us to reconceptualise the fundamental ways in we think about the world.

In philosophy, this challenge expresses itself in the quickly growing current of New Materialism (NM). NM fiercely rejects at least two ideas. Firstly, it rejects the 'discursive turn' of the 20th century, which attempts to explain reality through language, discourse and power. Secondly, it rejects the anthropocentrism of most of the Western philosophical tradition, which entails the idea that there is an unbridgeable gap between that which is human and that which is non-human. Both ideas for NM scholars are problematic because they do not allow us to articulate the material universe as it exists around us, which makes thinking climate change impossible.

NM authors answer to these issues by conceptualising an extensive interconnectedness and interdependence between every type of entity – including 'inert' matter, living matter, political systems, events, and humans. In their emphasis on relations between beings, however, many NM theories risk de-emphasising the beings themselves: the individual beings thereby tend to dissolve in the networks of relations they are caught up in, making it very difficult or sometimes even impossible to mark where one individual begins and the other ends.

This problem of individuals dissolving in their relations is recognised by various NM authors. Opinions on how to solve it, however, vary immensely. In this PhD project, I examine two ways in which the individual may be protected from dissolving in its relations, namely by reintroducing Simondon's theory of individuation into NM, or by following Deleuze's route of attributing a primordial form of consciousness to each individual.

Finally, although this problem might seem like an all-too technical, philosophical issue; this is untrue: as often happens with philosophically successful ontologies, their principles get translated into scientifically useful methodologies – Latour's Actor Network Theory is a recent example of this movement, and similar translations of NM are already happening (Fox & Alldred 2015; Thrope, Brice & Clark 2020; Andersson, Korp & Reinertsen 2020). To ensure that the individual is not ground down in these new NM methodologies like it is in NM ontology, it is hence paramount to rid this ontology of its conceptual weakness concerning individuality.

We expect our scientific institutions to aid us in combatting or enduring the Anthropocene. They can only answer to these high expectations if their methodological tools are as finely crafted as possible – that is, if the ontological foundations of their tools are as robust and powerful as possible. That is what this PhD will contribute to.

Curriculum Vitae

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EDUCATION

Radboud University Nijmegen, NL
Research M.A., Philosophy; Faculty of Philosophy, Theology and Religious Studies July 2024
Thesis: *The Mark of the Individual: conceptualising individuality in New Materialist ontology*
Supervisor: Arjen Kleinherenbrink

Radboud University Nijmegen, NL
Pre-Master Political Science; Nijmegen School of Management July 2022

Radboud University Nijmegen, NL
B.A. Philosophy; Faculty of Philosophy, Theology and Religious Studies July 2021
Thesis: *Tussen Noodzaak en Vrijheid: Een onderzoek naar de interne spanning betreffende de vrijewilskwestie in Kierkegaards filosofie*
Supervisor: Julie van der Wielen-Honinckx
Minor: Political Science
Cum laude

Gymnasium Beekvliet Sint-Michielsgestel, NL
NT/NG profile, Philosophy and Mathematics D July 2018
Honours SZG

TEACHING EXPERIENCE

Radboud University Nijmegen, NL
Student Assistant, Practical Philosophy April 2023 – July 2023

- Independently taught the work groups of the broader course 'Filosofie van de Managementwetenschappen,' two times a week, to a group of 25 students. Checked the essays of these students and administered their grades.

PUBLICATIONS

Pompstra, Coen. "Telling Non-Human Stories." *Splijtstof 51,* 4 (2023): 15-26.

EXTRACURRICULAR ACTIVITIES

August 2023. Participated in the "CFS Summer School for Subjectivity and Philosophy of Mind" at the University of Copenhagen.
March 2022. Participated in the "Annual OZSW Winter School for Research Master's Students" at Utrecht University.

June 2021. Participated in the Summer School "Kierkegaard: The Individual in the Global Scoiety" at University of Copenhagen, completed with a paper, graded 12/12.

CERTIFICATES

French B2 – In'To Languages May 2023

Cambridge C2 – Cambridge English Language Assessment June 2017

PROFESSIONAL EXPERIENCE

Le Griffon Paris, FR
Waiter (February 2024 – now)

- Responsible for taking care of the (mostly French speaking) clientele, learned invaluable French communication skills in addition to improving my spoken English.

De 4 Heeren Nijmegen, NL
Manager – Chief of Bar (July 2021 – now)

- Responsible for recruitment policy; training new employees; accepting, planning, and organising parties of up to 550 people.

Various Restaurants Vught/Nijmegen, NL
Waiter (June 2015 – Juli 2021)

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