Comments on Dumont, "Intension and Remission of Forms"

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Stephen Dumont has given us a masterful reconstruction of a fascinating fourteenth-century debate that lies at the boundary of metaphysics and natural philosophy. I have neither reservations nor additions to make to his analysis, and so will content myself with the role of cheerleader, offering merely a few remarks about why this material is so interesting.

In thinking about the debate over the intension and remission of forms, we might start by imagining a theory of the world that made no use of forms whatsoever: say, a view on which the only facts about the world worth keeping track of are facts about the location of particles in space over time. In such a context, problems of intension and remission can scarcely arise, because it is unproblematic to think of a particle's being located a little more in one direction or another, or moving a little more quickly or slowly. These are – at least on their face – strictly quantitative changes. Now suppose someone became dissatisfied with such a purely quantitative approach, and felt that it failed to give us an adequate explanation of what is happening in the world. There are of course many reasons, which any Aristotelian can recite, for thinking that a wholly reductive account in terms of particles in motion must be supplemented by some sort of story about the forms of things. Let us not be distracted by those familiar reasons, but instead notice that the proponent of forms might at this point go in two rather different directions. One direction would treat forms as essentially epiphenomenal, by which I mean that the forms would be a conceptual framework laid on top of some more reductive, mechanistic story. Accounting for the forms would be *necessary*, on this approach, but necessary only insofar as we wanted to be able to come to grips with the underlying reductive story in a way that is reasonably simple and intelligible. The forms, on this approach, would effectively give us tractable *labels* for talking about the messy reductive level, but the real action would still take place at that lower level. The forms would not play any true causal

role, and so might be dispensed with entirely in contexts where we were able to work directly at the complex level of particles in motion.

Contrast this with a picture on which forms enter directly and indispensably into our best scientific account of how the world is. Such a world will presumably include particles in motion, but will also include explanatory principles of a different sort, forms, which are not mere labels for other sorts of processes, but are themselves irreducible aspects of natural phenomena. One could not leave these forms out of the story, even in principle, without radically distorting the way nature works. Or, better, nature simply could not work without forms.

The problem of intension and remission might arise on either of these perspectives, but would do so in quite different ways. On the "epiphenomenalist" approach, the tendency of things to take on forms more and less intensely over time would be a necessary fact to account for, if our labeling were to track reality at all. Socrates is sometimes whiter and sometimes darker. This happens, indisputably, and we want to be able to put it in these terms, rather than have to dump our formal vocabulary and speak directly in terms of his surface particles reflecting more and less light (to put things anachronistically). So conceived, the problem of intension and remission becomes a linguistic puzzle: what does it *mean* when we say that Socrates becomes whiter? Are we saying that he loses one shade of whiteness and gains another? Or are we saying that there is a change to the whiteness that he possesses? Inasmuch as this epiphenomenalist approach as I am imagining it really believes in forms, the question is not empty. But inasmuch as this approach holds that the real causal, scientific story occurs at a deeper level – a level so thoroughly quantitative that these issues do not arise – the question lacks a certain urgency. To put it another way – the question seems purely *philosophical*. What conception of form best accounts for how we want to think and talk about the situation? Our puzzle in fact looks strikingly similar to modern puzzles over vagueness. Just as we want a satisfactory account of how to talk about properties that have no precise cut-off points –

say, when a thing ceases to be white and begins to be pale tan – so we want a satisfactory account of how to talk about any sort of qualitative change of properties. Does every such qualitative change mark the elimination of one property and the introduction of another, or can the same property endure through qualitative change? For the proponent of forms – or we might just call them properties – such questions ought to be seriously puzzling indeed.

Matters become much more serious, however, if we think forms enter into our best scientific picture of the world. If we think that we cannot – on any level – explain Socrates's becoming white without appeal to one or more forms of whiteness, then our problem is not a narrowly philosophical one, but a broadly scientific one. We would then face not just the question of how to analyze the way we naturally prefer to talk about change, but the question of how incremental changes can even happen in cases where the units of change do not appear to admit of increments. It is in this more serious guise that the problem appeared in the medieval context, inasmuch as these authors took the second of the above views – they were no epiphenomenalists. It indeed seems no exaggeration to say that the intension and remission of forms stood as one of the central foundational problems of scholastic natural philosophy, standing between a sustained Aristotelian metaphysics of form and quantitative physics in the modern style. Because scholastic philosophers could deal with these issues to some degree, they were able to take some steps along the road to modern science. But because the issues always remained to a considerable extent obscure, scholastic Aristotelianism was never able to provide a conducive environment for developing physics in a mathematical framework.

As we look back at this material, we might ask ourselves: are the problems here so serious that we ought to renounce forms altogether? Or is there one or more plausible ways in which a theory of forms can account for incremental qualitative change? And we should bear in mind, of course, as I have suggested already, that what goes for form may well go for properties too. Whether

or not we are Aristotelians, if we want to maintain a theory on which colors are properties of objects, we had better be prepared with a story about how objects incrementally change their colors.

So what are the options? If I have accurately tracked the territory Stephen lays out, there are two fundamental distinctions to be drawn. First, there is the question of whether incremental qualitative change is to be explained in terms of a single enduring form or a series of numerically distinctive successive forms. Opting for succession were Godfrey of Fontaines and Walter Burley. For those who endorse a single enduring form, a second fundamental question arises: is the incremental change at issue intrinsic to the form itself or extrinsic? Opting for an extrinsic solution were Aquinas and Giles of Rome. Opting for an intrinsic solution were Henry of Ghent, Scotus, and Thomas Wylton. In its main lines, this debate has been fairly well understood for quite a while, thanks to the work of Edith Sylla and others. Stephen's main contribution is to have discovered that Burley's well-known work in this area is part of an ongoing debate against Wylton. Stephen suggests that Wylton's long-forgotten view was in fact one of the most important positions on this issue in the fourteenth century.

To see what makes Wylton's view interesting, it is helpful to begin by considering the views of his opponents. What his opponents share is a commitment to the simplicity of form – in other words, they hold that a form does not have the sort of structure that admits of gradual change. One governing dictum here is the Aristotelian analogy: "forms are like numbers" (*Meta.* VIII.3, 1043b32). The picture suggested is that – and this is another Aristotelian dictum – forms do not admit of more and less (ibid., 1044a10). Just as a quantity either is or is not 5, so a body either does or does not have a specific determinate shade of blue. You may have a little more than 5 things, or a little less – perhaps you can even have 4.999 things. But *being 5* does not itself come in degrees, and the same holds for a determinate shade of blue, or for any quality. It is important to see that there are powerful reasons for wanting to insist on this all-or-nothing principle, beyond simply wanting to

adhere to a few authoritative passages. For it seems that the only way to allow variation on the part of a form is to introduce complexity within that form. Give the form parts, and we can then allow those parts to change. If, in contrast, forms are simple, then how can it vary, without becoming a different form? But how *can* we think of forms as having parts? What sorts of parts might they have? Formal and material parts? What would unify those parts? Would the parts themselves have parts? Will it ever end? Wyclif's opponents insist that complexity ends with form. Forms are the simple entities from which composite substances are made. Reasonably enough, there was a strong prejudice in favor of this sort of view.

But of course the qualities of things do become more and less intense. So, if forms are simple and cannot themselves change, how do their qualities change? The standard thirteenth-century view – found in different ways in both Aquinas and Giles of Rome – held that the very same unchanged quality can inhere more or less strongly in a given subject, and that the strength of its inherence determines the intensity with which the quality is possessed. This is a tidy solution, in a certain way, but puts a great deal of weight on the *inherence* relation. Inasmuch as no one had any very clear story to tell about what it is for an accident to inhere in a subject, this solution hardly counts as explaining much of anything. It simply shifts the locus of mystery from one place to another. Rather than explain the intensification and remission of *forms*, we would now need to explain the intension and remission of *inherence*, and the same questions arise all over again.

A much more straightforward solution, commonly ascribed to Godfrey of Fontaines, and later defended with considerable force by Walter Burley, simply gives up on trying to explain how the *same* quality can make its subject more or less qualified. Instead, when Socrates becomes progressively more white, he takes on a series of ever-so-slightly different qualities, each one being whiteness of a slightly different determinate shade. This succession view has considerable appeal, because it avoids the need for any sort of metaphysical subtlety. There is no need to drag the

inherence relation into the story, and no need to postulate that a quality can undergo intrinsic change, becoming more or less intense. What looks like change to a quality – Socrates's color – in fact is the replacement of one quality with another. To say that Socrates's color changes is not to say that one and the same color becomes more or less intensely white, but that Socrates loses his current color and acquires another. As an analogue to this line of thought, we might think of how some modern philosophers, when confronted with a substance's change over time, simply deny that a substance *can* change over time, and argue instead that what looks to be a single enduring substance is really a series of distinct, momentary stages, each one quickly replaced by another. Walter Burley's conception of accidental form is just like this. The exterior of your house may seem to have a single accidental form – its color – day after day, but in fact as its color fades in the sun over the years it is running through a series of forms.

This ought to look, prima facie, like a very promising solution to the problem of intension and remission. For whereas it seems on its face bizarre to think, as is today fashionable, that persisting *substances* are in fact a series of momentary substance stages, there is no such apparent bizarreness to the idea that seemingly persisting *accidents* are in fact sequences of temporary accident stages. After all, it is part of the very point of accidental forms that they are the sort of thing that come and go while their subject remains. Burley's succession view simply postulates that such accidents come and go more often than one might have supposed. Given the sorts of examples we have considered – things changing their color – it cannot even be said that Burley's approach looks counterintuitive. Speaking for myself, at any rate, I have no intuitions about whether a thing that slightly changes its color should be said to take on a *new* quality (a new accidental form), or should be said to undergo a modification in the character of the quality (form) it possesses. Given the difficulty of making sense of how an accidental form can undergo modification, it seems very natural to embrace succession, and say that all qualitative change, however slight, involves the loss of one

accident and the gain of another.

On careful scrutiny, however, the succession view faces some very powerful objections. Let me just remind you of two of Wylton's objections that Stephen mentions. First is the case of the drop of water extinguishing the entire heat of the heavens. A single drop of cool water lowers the temperature of the heavens, albeit very slightly. But if it cools the heavens, then the heavens no longer have the form they once had. Thus, absurdly, the entire heat of the heavens would be destroyed by a single drop of water. Burley's response to this objection tries to downgrade the extent of the problem here. He denies a single drop of water would change the temperature of the whole heavens, from east to west. And in that local area where there is a slight temperature drop, it is not as if the heavens would no longer be hot at all. But ultimately Burley has to concede that a small agent can produce surprisingly large effects. In general, on the succession view, qualities are surprising fragile. Just as the slightest force may cause an antique vase to crumble, so too any change at all to the qualities of a thing destroys the form that was there and brings a new form onto the scene.

Such fragility may not seem all that problematic in cases of color and temperature, but in other kinds of cases it seems extremely problematic, and this is perhaps Wylton's most powerful line of objection, one that he seems to take from Scotus's objections to Godfrey. Consider not sensible qualities, but habits, which are supposed to be characterized by their stability. On the succession view, habits turn out to be every bit as fragile as sensible qualities. This looks particularly bad with respect to the virtues. A virtue is supposed to be a quality that is acquired slowly, over a protracted period of time, as one's virtuous activity steadily strengthens the virtue. On the succession view, however, nothing like this can be the case. On the contrary, acts of virtue literally destroy the virtue that gave rise to them, and cause that virtue to be replaced by a numerically distinct virtue. Burley has no choice other than to hug this monster, and insist that the stability of habits refers to the

persistence of the broader kind of habit, even as individual instances change. A brave person, then, will possess no single enduring habit of bravery, but will stably possess one or another habit of a brave kind. This looks like a seriously counterintuitive result.

All of this was intended to bring us to a point where we can appreciate Wylton's solution to the problem of intension and remission of forms. If the succession view is implausible, and if we do not want to shift the problem over to the inherence relationship, then it seems that we need to find a way to allow the forms themselves to change intrinsically, becoming or less intense without losing their identity. Something like this was attempted by Henry of Ghent, Scotus, and finally Wylton. It is not entirely clear to me how Wylton goes beyond Scotus, and if I have one worry about Stephen's presentation, it lies there. He tells us that Wylton presents an important new chapter in the medieval debate, but without making it very clear what Wylton adds to the story. Wylton's main contribution, as far as I can tell, is the distinction between formal and material parts, as it gets applied to accidental forms. On the basis of the later, quodlibetal version of Wylton's account, it seems to me that this distinction is best viewed as an *analogy*. He introduces his idea by remarking that "these grades [of intensity] stand to this form of whiteness or heat just as a material part stands to the individual to which it belongs" (*Quodlibet* II q. 2, lines 332-34 of Dumont's typescript). He then runs through the familiar story about the material parts of a corporeal substance – that Socrates, for instance, has flesh and bones as a part of him, but not an essential part of him, which means that these parts can come and go while Socrates remains. Qualities, on Wylton's view, can similarly be said to have parts – grades of intensity – that come and go, even while the essence of the quality remains unchanged. He calls these "material parts," but I think this is not meant to be understood in any literal way, as if accidental forms contained any kind of matter that could be individuated into parts. Offering the theory merely as an analogy in fact frees him from constructing any sort of speculative story about *how* accidents are structured. Structure they must have, of a similar sort to the structure of composite

bodies, but Wylton refrains from offering any details.

This is quite an extraordinary view, inasmuch as it opens up the familiar framework of Aristotelian hylomorphism to a whole new level of composition. Whereas one might have supposed that the basic principles of natural beings are form and matter, it turns out that forms – at least accidental forms – are not simple at all, but themselves admit of further composition into their essence and their "material" parts. One can see why Wylton takes such desperate measures, however, when one sees the whole history of the debate, and all the available options.

Part of what makes all this so very interesting is that – as I suggested earlier – what goes for qualities would seem to go just as much for properties or for any modern analogue of accidental forms. The problem arises for any ontology that embraces the qualitative features of things and refuses to give a wholly reductive analysis of those things in terms of quantifiable magnitudes. To be sure, the Aristotelians were confronted with an especially virulent version of this problem, inasmuch as they wanted such qualities to play an eliminable causal role in natural philosophy. But the problem is very real for anyone who believes in such familiar properties like whiteness or heat, or in behavioral dispositions such as virtues and vices. Modern philosophers have hardly paid attention to this issue at all. But the difficulties it raises are so fundamental that one might well consider whether accidents and properties and habits and dispositions are perhaps more trouble than they're worth. If we have to treat them as constantly replaced in succession, or as having an intricate part-like structure, perhaps we would be better off getting rid of them entirely, by reducing them to some sort of wholly quantitative, micro-level account. We now know how to do this after all. Heat becomes particles in motion, color becomes light waves, the virtues become neural networks. If such thoroughgoing reductionism sounds unappealing, then we need some answer to the problem of intension and remission.