“Understanding the Object/Property Structure in Terms of Negation:

An Introduction to Hegelian Logic and Metaphysics”

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Outline of *Perception*:

1. [111]-[116]: Account of how things look to us, the phenomenological, retrospective-recollective consciousness.
2. [117]: First experience of phenomenal perceiving consciousness. Both the unity and diversity of properties and objects are seen as objectively in the independent objects and properties.
3. [118]-[120]: Second experience of perceiving consciousness. Divide the source of unity and the source of diversity between subjective and objective poles (act of perceiving and what is perceived).
4. Objective unity, subjective diversity.
5. Subjective unity, objective diversity.
6. [121]-127]: Third experience of perceiving consciousness. Unity and diversity both objective: unity in independent objects, diversity derives from their relations to one another (what they are *for* one another).
7. [128]-131]: Summary of how things look to us, transition to next section.

There are fundamental conceptual reasons to understand the notion of determinate difference as implicitly involving the metadistinction between two kinds of difference: exclusive difference and compatible difference [ausschlieβende vs. gleichgültige Verschiedenheit].

One important way in which the enriched empiricism Hegel is considering differs from traditional empiricism (including its twentieth-century variants) lies in its rejection of the latter’s *atomism* about the contents of immediate sensory experience. If their exclusive differences from one another are an essential part of what is given in experience, then each has the content it does only as a member of and in virtue of the role it plays in a constellation of interrelated contents.

Hegel’s principal metaphysical primitive, determinate negation, is intrinsically and essentially a *modal* notion. The material incompatibility of red with green and circular with triangular is a matter of what *can* and *cannot* be combined, what is and is not *possible*. Modality is built into the metaphysical bedrock of his system.



Determinate negation also contrasts with formal or abstract negation. This is the distinction between Aristotelian *contraries* and Aristotelian *contradictories*.



Hegel takes determinate negation (material incompatibility) to be prior in the order of explanation to formal or abstract negation. He accordingly has the second picture in mind, understanding contradictories in terms of contraries. The tradition of extensional logic and semantics, extending from Boole through Russell to Tarski and Quine, adopts the other order of explanation, understanding material incompatibility as contrariety in terms of formal incompatibility as contradictoriness or inconsistency.

I am going to call a conception of the objective world as consisting of particular objects that exhibit repeatable properties (universals) as having an “aristotelian” structure.

There are two broad explanatory strategies available to explicate the aristotelian structure of objects-and-properties. Hegel wants to explain it in terms of determinate negation, relating property-like features. I want to illuminate that metaphysical approach by contrasting it with the extensionalist Tarskian tradition, which starts with objects understood as *merely* different. The two orders of explanation exploiting the relations between contraries and contradictories (hence determinate and formal, abstract negation) are embedded in more encompassing converse explanatory strategies for articulating the aristotelian object/property categorial structure, rooted in the metadifference between incompatible and compatible differences.

There are three distinct moves in the process by which the metaphysical structure of objects-with-properties is found to be implicit already in what would be expressed by a purely feature-placing vocabulary, once the features deployed in that vocabulary are understood to stand to one another in relations both of compatible and of incompatible difference. Each one involves adding to the picture a further kind of difference, so a further articulation of the complex notion of determinate negation.

The first move puts in place the intercategorial difference between properties and objects, or universals and particulars.

The second move puts in place an intracategorial difference between two roles that particular objects must play with respect to properties, reflecting the intracategorial difference between merely different and exclusively different properties.

The third move registers a fundamental intercategorial metaphysical difference between objects and properties with respect to mere and exclusive differences.

Understanding functional units of accounts for incompatible sense repeatables more specifically as *objects* or *particulars* involves further unfolding of what is implicit in distinguishing compatible or merely different sense repeatables from incompatible or exclusively different ones.

Hegel says of the features that “these determinatenesses…are really only properties by virtue of the addition of a determination yet to come,” namely thinghood. [*PhG* 113] He elaborates that notion of thinghood along two dimensions: the thing as *exclusive* and the thing as *inclusive*. In talking about these two different roles essential to being a “*thing* of many properties”, he describes it as on the one hand “a ‘one’, an excluding unity,” and on the other hand as an “ ‘also’, an indifferent unity.”

[I]f the many determinate properties were strictly indifferent [gleichgültig] to one another, if they were simply and solely self-related, they would not be determinate; for they are only determinate in so far as they differentiate themselves from one another [sie sich unterscheiden], and relate themselves to others as to their opposites [als entgegengesetzte].

This is the by now familiar point that determinateness requires exclusive, incompatible difference, not just mere or indifferent, compatible difference.

Yet; as thus opposed [Entgegengesetzung] to one another they cannot be together in the simple unity of their medium, which is just as essential to them as negation; the differentiation [Unterscheidung] of the properties, insofar as it is...exclusive [ausschließende], each property negating the others, thus falls outside of this simple medium.

The ‘medium’ here is thinghood, the objects that exhibit the properties:

The One is the *moment of negation*… it excludes another; and it is that by which 'thinghood' is determined as a Thing. [*PhG* 114]

This abstract universal medium, which can be called simply thinghood…is nothing else than what Here and Now have proved themselves to be, viz. a *simple togetherness* of a plurality; but the many are, *in their determinateness*, simple universals themselves. This salt is a simple Here, and at the same time manifold: it is white and *also* tart, *also* cubical…. All these many properties are in a single simple ‘Here’, in which, therefore, they interpenetrate…And at the same time, without being separated by different Heres, they do not affect each other in this interpenetration. The whiteness does not affect the cubical shape…each…leaves the others alone, and is connected with them only by the indifferent Also. This Also is thus the pure universal itself, or the medium, the ‘thinghood’, which holds them together in this way. [*PhG* 113]

[T]he medium in which these determinations permeate each other in that universality as a simple unity but without making contact with each other, for it is precisely through participation in this universality that each is on its own, indifferent to the others—As it has turned out, this abstract universal medium, which can be called thinghood itself…is none other than the here and now, namely, as a simple ensemble of the many. [*PhG* 113]

This simple medium is not merely an “also,” an indifferent unity; it is also a “one,” an excluding unity. [*PhG* 114]



...these *diverse aspects*...are *specifically determined*. White is white only in opposition to black, and so on, and the Thing is a One precisely by being opposed to others. But it is not as a One that it excludes others from itself...it is through its *determinateness* that the thing excludes others. Things are therefore in and for themselves determinate; they have properties by which they distinguish themselves from others. [*PhG* 120]

Property *Q* is the opposite of property *P* in this sense just in case it is exhibited by all and only the objects that do not exhibit *P*. This is how not-red is related to red. An argument due to Aristotle [Book V of the *Categories*] shows that objects do not have opposites in this sense of contradictories. The corresponding notion of an opposite in the ontological category of objects would have object *b* being the contradictory of object *a* just in case *b* exhibits all and only the properties not exhibited by *a*. But the properties *not* exhibited by any object always include properties that are incompatible with one another, and hence not all exhibitable by any one object.

The Indiscernibility of Identicals says that mere difference of properties is sufficient for mere difference of objects. The Identity of Indiscernibles says that merely different objects have at least merely different properties. I think Hegel endorses these principles. But his talk of objects as excluding one another suggests that he also endorses a further, stronger principle: different objects not only have *different* properties, they have *incompatible* properties. We might call this principle the “Exclusivity of Objects.” Such a view would satisfy three criteria of adequacy, the first two of which are set by the passage most recently quoted above.

* It would underwrite talk of objects as excluding one another.
* It would do so by appealing to the more primitive notion of properties excluding one another.
* And it would respect the differences between property-exclusion and object-exclusion that are enforced by the Aristotelian argument showing that objects cannot have contradictories definable from their exclusions (in the case of properties, their contrarieties) in the way that properties do.

In effect, the Exclusivity of Objects says that it never happens that two objects are distinguished by their role as things-as-alsos combining different compatible properties, according to the discernibility of non-identicals version of (LL2) unless they are *also* distinguished by their role as things-as-excluding-ones. There is no mere difference of properties distinguishing objects without exclusive difference of properties (having incompatible properties) distinguishing them. This is a topic on which Leibniz’s Law is silent.

In a sense, then, for the identity and individuation of objects, the exclusiveness of objects, which appeals to exclusive difference of properties, is more basic in the Hegelian order of explanation than Leibniz’s Law, which appeals to mere difference of properties.

Perception…takes what is present to it as universal. [*PhG* 111]

As it has turned out…it is merely the character of positive universality which is at first observed and developed. [*PhG* 114]

Only perception contains negation. [*PhG* 111]

Being…is a universal in virtue of its having mediation or the negative within it; when it *expresses* this in its immediacy, it is a *differentiated*, *determinate* property. [*PhG* 113]

Since the principle of the object, the universal, is in its simplicity a *mediated* universal, the object must express this its nature in its own self. This it does by showing itself to be *the thing with many properties*. [*PhG* 111]

Hegel summarizes what we will learn, by talking about

…sensuous universality, that is, the *immediate* unity of being and the negative…

…the thing as the truth of perception reaches its culmination to the extent that it is necessary to develop that here. It is

α) the indifferent passive universality, the also of the many properties, or, rather, matters.

ß) the negation generally as simple, that is, the one, the excluding of contrasted properties, and

γ) the many properties themselves, the relation of the two first moments: The negation, as it relates itself to the indifferent element and extends itself within it as a range of differences; the point of individuality in the medium of enduring existence radiating out into multiplicity. [*PhG* 115]

Hegel’s metaphysical analysis of the fine structure of the aristotelian object-with-many-properties, and his derivation of it from the concept of determinate universality proceeds by distinguishing:

1. mere or “indifferent” [gleichgültig] difference of compatible universals

from

1. exclusive difference of incompatible universals.

This brought into view the

1. metadifference between mere and exclusive difference.

This is the first intracategorial metadifference, between differences relating universals to universals. It is a kind of exclusive difference, since the universals must be either compatible or incompatible.

Within exclusive difference there are two species, which can be related by two opposing orders of explanation:

1. material contrariety, corresponding to determinate negation,

and

1. formal contradictoriness, corresponding to abstract logical negation.

There is then also the

1. metadifference between determinate and abstract negation logical negation.

This is the second intracategorial metadifference, between differences relating universals to universals. These are not exclusively, but only compatibly different. Contradictories are a kind of contrary: minimal contraries.

Implicit in the concept of repeatables as universals is the

1. difference between universals and particulars.

This is the the first intercategorial difference. It, too, is a kind of exclusive difference.

Implicit in the concept of particulars in relation to universals is the

1. difference between two roles they play:

* particulars as ‘also’s, that is as medium hosting a community of compatible universals, and
* particulars as “exclusive ones,” that is as units of account repelling incompatible properties.

This is the first intracategorial difference between roles played by particulars. These are what we might call *strongly* compatibly different roles, since *every* particular not only *can* but *must* play both.

Corresponding to this difference on the side of particulars is the

1. difference between two roles universals play with respect to particulars:

* universals as related to an inclusive ‘One’ in community with other compatible universals, and
* universals as excluding incompatible universals associated with different exclusive ‘One’s.

1. Difference between universals and particulars that consists in the fact that universals *do* and particulars do *not* have contradictories or opposites.