THE RELEVANCE OF HEGEL’S LOGIC

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ABSTRACT: Hegel defines his Logic as the science that thinks about thinking. But when we interpret that work as outlining what happens when we reason we are vulnerable to Frege’s charge of psychologism. I use Hegel’s tripartite distinction among understanding, dialectical and speculative reason as operations of pure thought to suggest how thinking can work with objective concepts. In the last analysis, however, our ability to move from the subjective contingency of representations and ideas to the pure concepts we think develops from mechanical memory, which separates sign from sense so that we can focus simply on the latter. By becoming aware of the connections that underlie our thinking processes we may be able to both move beyond the abstractions of symbolic logic and clarify what informal logicians call relevance.

KEYWORDS: Hegel; Conceiving; Dialectical Reason; Gottlob Frege; Infinity; Logical Necessity; Mechanical Memory; Psychologism; Science of Logic; Speculative Reason; Thinking; Understanding

Metaphysical readings of Hegel’s Logic have always been popular. McTaggart, for example, claims that Hegel’s logic analyzes what happens when categories are predicated of a subject. Because inconsistencies arise between such a thesis and its antithesis, the logic progresses until we have a fully consistent description of a subject. The logical moves through thesis and antithesis to synthesis do not describe reality as it actually is, but rather reflect the way finite and incomplete thought corrects its subjective and limited predications on the way to completeness.¹

This perspective was taken further by Bradley. For him, the logic is designed to show how all the elements of thought are ultimately interconnected in ‘the Absolute’. And we find similar claims in the commentaries of E.E. Harris, Charles Taylor and Clark Butler.²

Stephen Houlgate takes another approach; he says that thought simply is being.³ I

find this statement puzzling, however. Is he saying that any act of thinking must be? But then it is not clear why the determinations of thought apply to anything more than the thinking that is doing it. Or is he saying that being, wherever and whenever it is found, is also pure thought? But that sounds almost as preposterous as the earlier talk about an entity called ‘the Absolute’.

In that phrase, the definite article suggests something singular and unique. But ‘absolute’ started out as an adjective. As Kant points out, ‘absolute’ means two things: that which is isolated from any context that would relativize it—and that is certainly an unhelpful description of ultimate reality. Or it is that which is valid in all respects.⁴ Transforming the adjective—which basically means ‘that which is not relative’—into a noun seems misplaced. For if the absolute is valid in all respects, then we are ourselves somehow incorporated into its reality, and any claim that, from our finite, involved perspective, we can somehow grasp an objective and comprehensive description of all that is sounds like presumptuous hubris.

My second problem with the metaphysical approach lies in the way it justifies the necessity of the logical progression. The classical British idealists and their successors all suggest that the contradictions and antitheses that drive the logic forward are simply the results of our limited perspective. They are flaws within our natural ways of thinking. And our task is to somehow get beyond these limited perspectives to what is ultimately real. Once we reach our goal, we can cast away the ladder that gets us there. But this implies that, were we to develop suitable intuitive capabilities, we could dispense with the logic altogether. The logic is simply a way we can therapeutically dispose of the impediments that clutter up our everyday existence.

In contrast, Hegel seems to think that the various moments within the logic are significant for understanding the world around us. They are not simply aspects of the way we think, but also of the natural world and historical experience we encounter from day to day. The transition by which ‘something’ comes to the limit of its capabilities and converts into ‘something else’ is not just a function of our thinking, but also describes the world of finite things: of rocks and continents, of flowers and dinosaurs, of human beings and the Canadian economy.

On the other hand, for those who think that each of Hegel’s categories describes some particular metaphysical reality or principle, one finds it difficult to see how one such principle could ever metamorphose into another one: how the principle that differentiates a substance from its accidents, for example, can be transformed into the principle that differentiates cause from effect. We have, after all, been nurtured within the philosophical heritage of Plato, where metaphysics describes the universal, non-temporal and so unchanging ideas that undergird and explain the changing phenomenal world of every-day. Such metaphysical principles are in some sense eternal and unchanging.

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Let me summarize: when we read Hegel’s *Logic* primarily as a kind of metaphysics, we come up with something that is not ultimately convincing. We either come up with a metaphysical entity that does not impinge on our normal experience, or we have to abandon any sense of a logically necessary progression. Even more, it is hard to see what relevance such a reading can have for our everyday life—unless we think that we should immerse ourselves in a Buddha-like quest for enlightenment, or go around spouting an incomprehensible explanation of what the world is like, using obscure technical terms in the manner of Alfred North Whitehead.

When I started digging into Hegel’s logic, the first thing I encountered was his claim that the logic is thought thinking itself. This is found in Paragraph 19 of the *Encyclopaedia*:

> ‘logic’, he writes, ‘is the science of the pure idea; that is, the idea in the abstract element of thinking’. And he underlines ‘thinking’ in that last clause. While he does not want to justify his study of logic simply on the basis of its utility, he does allow that it has its uses. For in the accompanying remark he writes: ‘The usefulness of the logic is a matter of its relationship to the subject, insofar as one gives oneself a certain formation for other purposes. The formation of the subject through logic consists in one becoming proficient in thinking (since this science is the thinking of thinking) and in one’s coming to have thoughts in one’s head and to know them also as thoughts.’

To be sure he immediately goes on to say that the logic also explores truth in its purity, but he adds that usefulness is nonetheless a proper characteristic of whatever is most excellent, free and independent.

Important to notice in my last citation is Hegel’s aside that the science of logic is the ‘thinking of thinking’.

Similar expressions can be found in the larger *Science of Logic*. In its introduction, Hegel starts by noting that the logic must not only establish the proper scientific method, but must explore the very concept of what it means to be a science. Its subject matter—that which is to be its most essential content—is ‘thinking, or more precisely conceptual thinking’, and again he underlines the critical terms. Later in the introduction, just before he says that the logic presents God as he is in his eternal nature before the creation of the world, he points out that ‘the logic is to be understood as the system of pure reason, as the realm of pure thoughts’.

The most obvious way of reading all this is to assume that Hegel is going to explore what goes on when we reason—we are going to think about what happens when we think. If he says at the same time that this is the description of God before the creation of the world, he can only mean that God is pure thought—and that whatever happens in our thinking in some way reproduces the inner life of God.

But there is a fly in the ointment. For thinking is never static. We clarify our thoughts and render them more precise and determinate; we find that some thoughts

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lead on to other thoughts through something we usually call inference or implication. If, instead of relying on simple nouns like 'concepts' or 'thoughts' to describe this reality, we adopt active gerunds like 'conceiving' or 'thinking', we immediately realize that we are immersed in a dynamic that moves and develops. Concepts emerge out of that thinking and disappear back into it again. But this means that, when we talk about such processes, we become vulnerable to the charge of psychologism. If we are going to talk about thinking as an activity, we will be simply exploring the way human intellects happen to function.

Indeed, that charge emerged quite quickly. In one of the first, most thorough, and most complimentary reviews of On Hegel's Logic, published in the Owl of Minerva, George di Giovanni focused on the fact that, in an effort to clarify the distinction between representation and thought, I had relied on Hegel's discussion of Psychology in the Philosophy of Spirit. Representations are based in intuitions, and are thus prey to the contingencies of personal experience. By deriving thinking from representing, I was in danger of removing from the logical discussion the necessity that follows from the inherent determinations or definitions of the concepts themselves.

In my discussion of logical necessity, I had said, 'The claim of absolute necessity for the logical analysis has not been justified in the preceding commentary. ... The reader was invited to refer simply to his own intellectual operations.' And again, 'We have defined pure thought relative to the psychological operations of intelligence; and these are known to us only in the context of the human species.' To these comments, di Giovanni replies: 'To the reader these disclaimers are suspect not because of what they say, but because they are made at all. Either Hegel's Logic has absolute validity qua logic, and this has already been established by reflection on its idea; or it is not logic at all. No middle position is possible. We are left with the suspicion, therefore, that Burbidge has been trying to validate Hegel's Logic on psychological grounds; and to the extent that this was his intention, he cannot escape the charge of psychologism.'

Psychologism, as a fallacy threatening the objective necessity of logic, was first identified by Gottlob Frege. He drew the same distinction drawn by Hegel: between Vorstellung and Begriff. Unfortunately that has been lost for his English readers, because his translators have translated Vorstellung with 'idea', not 'representation', following in the tradition established by Locke and Hume. Ideas, for Frege as for Hegel, involve images or representations—mental pictures that stem from the idiosyncratic experience of the subject in whom they occur. Thus they provide no established common point of reference to which all people can appeal. 'The idea (Vorstellung) is subjective': writes

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Frege, ‘one man’s idea is not that of another. There result, as a matter of course, a variety of differences in the ideas (Vorstellungen) associated with the same sense. A painter, a horseman, and a zoologist will probably connect different ideas (Vorstellungen) with the name ‘Bucephalus’. This constitutes an essential distinction between the idea (Vorstellung) and the sign’s sense, which may be the common property of many people, and so is not a part or mode of the individual mind’.11

For Frege, the study of individual minds is psychology, and any attempt to derive logic from what minds do, in the manner of the British empiricists, is bedevilled by the contingencies of each person’s peculiar mental history. In contrast, concepts persist, are unaffected by particular experiences, and are common to whoever thinks them. In drawing that distinction, however, he placed concepts in an anomalous position. As graduate students back in the fifties, we were told that a critical question for the philosophy of logic was the ontological status of concepts and propositions. Do they exist in some kind of Platonic heaven, simply waiting to be grasped by some perceptive and disciplined thinker? If not, how do they maintain their inviolable character?

For Frege, because concepts are isolated from any contamination by the minds that think them, they persist unchanged and static. With that as his philosophical context, then, it is not surprising that Inwood, in his massive, but seriously flawed, study of Hegel’s arguments, insists that ‘Concepts and their interrelationships are static in a way that our thinking is not’.12 It is no wonder that he can find nothing relevant in Hegel’s logical discussions.

Yet, even as Frege dismisses psychology, he continues to use psychological terms when talking about concepts. So there are indications, even in Frege’s writing, that there may be more to be said about the dynamics of thinking than he allows. For concepts can be grasped.13 ‘The grasp of a thought’, he commented towards the end of his life, ‘presupposes someone who grasps it, who thinks. He is the owner of the thinking, not of the thought. Although the thought does not belong with the contents of the thinker’s consciousness, there must be something in his consciousness that is aimed at the thought’.14

Throughout The Foundations of Arithmetic we find similar references to the intellectual dynamic involved in grasping a thought: ‘Often it is only after immense intellectual effort, which may have continued over centuries, that humanity at last succeeds in achieving knowledge of a concept in its pure form, in stripping off the irrelevant accretions which veil it from the eye of the mind’.

At one point Frege suggests that this ability to grasp thoughts is improved when we are able to dissociate ourselves from the particular conditions of our native language,

13. See Frege’s letter to Husserl: ‘Thoughts are not mental entities, and thinking is not the mental generation of such entities but the grasping of thoughts which are already present objectively’ (my italics). Beaney (ed.), The Frege Reader, p. 302.
with the associations and feelings that have become attached to them: ‘It is true that we can express the same thought in different languages; but the psychological trappings, the clothing of the thought, will often be different. This is why the learning of foreign languages is useful for one’s logical education. Seeing that the same thought can be worded in different ways, we learn better to distinguish the verbal husk from the kernel with which, in any given language, it appears to be organically bound up. This is how the differences between languages can facilitate our grasp of what is logical.’

However, Frege’s distinction between our thinking and the thoughts themselves ‘which are not mental entities’ seems to me to be problematic. Consider what goes on in that process of ‘achieving knowledge of a concept in its pure form, … of stripping off the irrelevant accretions’, taking as our example the concept ‘infinity’. We start by thinking of that which, unlike the finite, has no limits. As beyond any such limit, the infinite can be thought of as a simple ‘beyond’. But that has its problems, because it is, to that extent, limited by the fact that it is other than the finite. And as limited, it is itself finite. So we start on a process of moving beyond each limit, only to find that we have only derived another limited thought. When we think back over this dynamic, we come up with a new sense of ‘infinite’ as that which is this process continually repeated. This is the sense we now associate with mathematical infinity—the fact that any process an be repeated endlessly.

You will have recognized that I have been describing Hegel’s analysis of this concept. He suggests that we use this concept of infinite regress not only for mathematics but for qualitative distinctions as well. Whenever any determinate quality comes to an end, the result is simply another determinate quality—and ‘infinite’ describes the progress or regress by which the dynamic continues on its way.

We now have two or three different definitions of ‘infinity’. The abstract ‘beyond’, the infinity of a recurring mathematical sequence, the infinity of a process where finite things disappear, but never into nothingness, but only into other finite things. Which of these is the pure concept that we are endeavouring to grasp? The logical mathematician would probably prefer the mathematical sequence. But notice that it has emerged only because our thinking has been led to move beyond any determinate number to the next. That thinking dynamic is implicit within our definition of the mathematical term. Thinking has become a component of the thought.

There may be other senses of ‘infinity’ as well. When we reflect back on the dynamic of an infinite progress or regress, we see that when we consider it as a whole, we have a process in which determinate finite moments are both generated and transcended. Here we are not talking simply about a linear sequence, but a self-contained dynamic that both increases in complexity and at the same time maintains its comprehensive

15. ‘Logic’ [154] in Beaney (ed.), The Frege Reader, p. 343 (my italics). I was delighted when I discovered this passage, because it fitted with my own attempt to move beyond the relativity of cultures through an exploration of the way a knowledge of different languages moves us towards concepts. See On Hegel’s Logic, Chapter 3.
unity. Here we have a quite different sense of ‘infinite’. But it, too, has resulted from our thinking about the earlier forms and contains the dynamic of that thinking implicit in its meaning. Thought and thinking are not as isolated as Frege wants to assume. One concept merges into another.

In providing this illustration, I want to suggest that the minds which provide the subject matter of psychology do more than simply represent experiences in retained images or ideas, as the British empiricists have it. The intellect can reflect back over those experiences and extract similarities and common elements; it can distinguish some of those elements from others. In the course of doing so, it starts on a process of distancing itself from the contingent associations and experiences of our original intuitions and of moving toward common, persisting concepts. It is that process of distancing that Hegel traces in his psychology. Nonetheless, for all that reflective thought has removed contingencies when we come to pure thinking, the intellect is still active in generating thoughts. An intellectual dynamic remains. We have made no leap across a nasty broad ditch into some alien genus, some ethereal realm of pure concepts that we simply contemplate. But what we are now thinking has been refined and purified, freed from the contingencies of representation and idiosyncratic experience. In other words, Hegel provides a naturalistic explanation for Frege’s distinction between ideas and concepts.

I must confess that, in On Hegel’s Logic, I did not show clearly how Hegel wanted to distinguish the contingencies of representations or ideas from the necessity of concepts. And to this extent I was vulnerable to di Giovanni’s attack. But it seemed to me, and it still seems to me, that we have to establish the context within which thought functions if we are to make any sense of Hegel’s logic of concepts; and that means that we have to take seriously the dynamic that actual thinking involves.

Hegel identifies three sides to that dynamic, which he calls understanding, dialectical reason and speculative reason. Let me quickly remind you what these kinds of reasoning involve.

The task of understanding is to fix the determinations of a concept—to define it carefully and precisely, and isolate it from the flux of thinking. To do this we must distinguish it from all contingencies and keep its conceptual components separated from other related concepts.

But this has an interesting consequence. For, if we are to get the original concept precisely defined, we need to define as well these related terms—its contraries and its close synonyms—so that the various terms do not become confused. This involves two distinct operations. There is, first of all, distinguishing two contraries that sit within a more general concept or genus. Thus, when we think of the term ‘something’, we must also define the term ‘other’; when we understand ‘actual’ we must also be clear on ‘possible’, when we talk about ‘subjectivity’ we must be aware of what we mean by ‘objectivity’.

But there are also close synonyms where we need to discern slightly distinct meanings. In ordinary conversation ‘being’, ‘existence’, ‘actual’, ‘real’, and ‘objective’ can frequently substitute for one another. But we find that each one has a subtle character of its own.
that needs to be marked out precisely if we are to understand the concept (as opposed to our conventional associations) and get it right.

In much philosophical discourse, understanding a term involves abstracting it from its context, and then holding it fixed as an unchanging entity. It then subsists in some kind of static realm, and becomes the basis for Frege’s and Inwood’s permanent and unchanging concepts. But when we think about the actual process of thinking we are aware that understanding a term introduces a move on to other terms—to those contraries from which it is differentiated, and to those subtle determinations that distinguish it from its close synonyms. This is the process Hegel calls dialectical reason: ‘the dialectical moment is the peculiar or typical self-cancelling of these kinds of finite determinations and their passing over into their opposites’ (EL § 80). Thought cannot stay fixed with its original isolated terms.

There are several important terms in that definition of dialectic. The first is the term ‘self-cancelling’. Hegel is suggesting that when we focus on the original term in its precise definition we find that it requires our moving on to the contrary and other determinations. We do not introduce some casual consideration from outside because of our sense of where we want to go. The meanings inherent in the initial concept require that thought move over to an opposite, precisely because the determinations set a limit, and we can understand the limit only if we are clear about what is on the other side.

The second term is one omitted by both translations—by Wallace and the Geraets team: The German modifies self-cancelling (Sichaufheben) with the adjective ‘eigene’—which means ‘typical’, ‘strange’, ‘peculiar’, or ‘particular’. The self cancelling of dialectical thinking does not follow a preordained method or rule. It emerges from the peculiar nature of the concept being thought—from its specific and determinate sense. This is why there can be no discussion of method apart from a consideration of what happens when we actually think. We saw an example of this kind of dialectical move as we went from ‘finite’ to ‘the beyond’, and then from there on to ‘infinite regress’.

Had we only understanding and dialectical reason, we would be left with nothing but a stream of thoughts, as we move on from thought to thought, each move determined by the specific sense of the preceding concept. But we can do more. We reflect back over what has happened and in a single thought consider both the original term and the opposites that result from its definition. In other words we bring them together and think them as a single thought—as a unity. This means that we can identify what particular senses and meanings bind them together. And we can incorporate those determinations into the characterization or definition of this new thought. ‘The speculative, or the positively rational grasps the unity of the determinations in their opposition, the affirmative that is contained in their dissolution and transitions’ (EL § 82). This process of speculative reason is also a dynamic one, working from the original meanings and discovering implications and interconnections that integrate the variety of senses. (We saw this happening in the final sense of ‘infinity’ discussed before.) With this, we set the stage for understanding to start once again fixing the required definition. When understanding isolates that network of meaning, integrates it into a unity and establishes its precise meaning, it generates a
new concept.

It is worth recalling here a section of Kant’s *Critique of Pure Reason*, particularly in the first edition. In both the Clue to the categories, and their Transcendental Deduction, Kant distinguishes the syntheses of imagination from the unity introduced by the understanding.\(^{17}\) It is this unity which establishes the particular determinate character of a concept. Unlike Kant, Hegel, in his *Logic* does not rely on imagination as the agent of synthesis. Rather it is reflection on the dialectical transition from one concept to its contrary—that peculiar self-cancelling—that brings together, or synthesizes, the various terms. But understanding a concept involves finding the grounds or reasons that underlie the conceptual synthesis. Once again, the logic follows from the inherent character of the senses being discussed.

Two things need to be highlighted. In the first place, this whole movement follows from the inherent significance of the concepts being thought. It does not reflect anything brought in from the subjectivity of personal experience. This is the point di Giovanni was making in his review.

But the second thing to notice is that it is a movement, a dynamic. Thought moves from the original concept to its opposite; thought brings together the two terms and integrates them into a unity, using the principle of sufficient reason, thus generating a new network of meanings. This dynamic is inherent in the very nature of reason itself. It is what constitutes the rationality of the logic, and by implication the rationality of the world itself.

How, then, is Hegel, within his psychology, able to make the move from the contingencies of representation to this focusing on pure thought, while retaining the dynamic of intellectual activity? He does so through the working of memory, and in particular mechanical memory. The imagination has introduced signs. And signs refer to that which is common to, or relates, various representations. They have already taken us beyond the specifics of experience to the content that ideas share. Even so, signs retain the contingency and arbitrariness of their initial formation. Memory begins to dilute this contingency, first by attaching a sign to the same content over and over again, so that they become melded to each other. The circumstances of its origin becomes irrelevant. Then, when we say things by heart, we string together a number of signs without paying any attention to their meaning. In this kind of mechanical memory, words simply come out one after another and we pay no attention to the meanings they represent. In other words, we say the words without thinking.

For Hegel, however, this has a dialectical implication, for if we can string off signs without meaning, we can equally well consider meanings without signs. The process becomes inverted. It is this inversion that frees thought finally from the contingencies of representations and experience. For we can now focus on the content of those thoughts and determine them precisely without any reference to the circumstances under which they originated. It is this significance of mechanical memory that had eluded me in my early work, and thus justified di Giovanni’s concern.

\(^{17}\) Kant, *Critique of Pure Reason*, A76-80/B102-5, A95-90.
Hegel's development of a logic based on the dynamic of thinking, it seems to me, has much to say to contemporary discussions.

Nurtured on Frege's anti-psychologism, with its radical distinction between pure, static concepts and the contingencies of the mind's ideas or representations, modern symbolic logic works only with forms, assuming that concepts can be plugged into the various slots without distortion and without residue. As a result it has moved further and further from the kind of reasoning by which people govern their lives, leaving in its wake freedom for contingent associations to react to, and feed on, rhetoric and emotion. Formal logic has no tools with which it can criticize or assess the natural inferences people make every day, no way of distinguishing when an implication is grounded in the sense being thought, and when it brings in irrelevant considerations. It can identify a modus ponens or a Barbara syllogism; but it cannot distinguish between a syllogism which picks up thoughts only contingently related, and those where meanings are connected through a structure of implication. ('Implication,' after all, means drawing out what is implicit.) Within its own sphere, symbolic logic has proven to be a powerful tool for developing a calculus; but by claiming to define exhaustively everything involved in logic proper, it has abandoned any role in governing the way we human beings actualize our rational natures. Ironically, by abandoning the dynamic of concrete reasoning, logic has left the field open for post-modernist deconstruction.

The study of informal logic has moved into that vacancy, and attempted to develop strategies for improving the way people reason. But the most critical criteria for assessing normal reasoning is that of relevance, and informal logicians have found it difficult, if not impossible, to identify what it means for one thought to be relevant to another. By staying within the traditional understanding of concepts as fixed entities, they can only show connections by bringing in contingent and psychological associations, following the practice of the British empiricists, or refer to the expectations of the audience. An Hegelian interest in exploring the dynamic movement inherent in thought could well illuminate what it means to be relevant.

So there is much that Hegel's *Logic* could say to the world of contemporary philosophy. Were we to return to his large three volumed work, we would find hidden in its obscure prose a number of insights into those relationships among concepts that hinge on their objective significance. Even if many of them were to prove conditional, dependent on a particular culture or a particular age, the approach he takes may provide a useful guide for exploring the connections between thoughts in our own culture and our own age. This becomes possible as we stress the role of thought and thinking as providing the foundation of the Logic, and reduce its metaphysical claims to a secondary role. It is because thought requires that we move as we do from concept to concept that the logic builds up its edifice. The fact that this edifice of pure reason captures the core significance of nature and history, revealing their inherent rationality, suggests that our thinking and its dynamic, working within its own inherent necessity, has the capacity of grasping the nature of things. But we need to make sure that we get the horse before the cart. If we do want to draw metaphysical conclusions, we need to start by thinking...
simply about the nature of pure thought. For it is that logical dynamic, says Hegel, that describes God’s nature as he is before the creation of nature and finite spirits.

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