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## Hegel and the Logical Form

*The subject-matter is visible to everyone, content is only discovered by him who has something to contribute, and form is a mystery to most.*

Johann Wolfgang von Goethe  
(*Maxims and Reflections*)

**Abstract.** The concept of logical form, as influentially specified by Frege and Bolzano, is accompanied by a paradox: to capture some universal property of discourse, we must specify that property, thereby rendering it particular and thus unsuitable for the universal purpose. Thus, instead of a single form, we have rather a sequence of them, corresponding to the logics of Aristotle, Frege, Brouwer, and others. In this paper, I argue that Hegel’s conception of logical form focuses on this historical aspect of the problem. Thus, he does not create a new logical form, e.g., that of dialectical logic, as Marx, as well as Priest and others, believe, but makes the attitude towards “fixed determinations” of logic part of these determinations themselves. This corresponds to Hegel’s differentiation between three layers of logic: formal, dialectical, and speculative.

**Keywords:** Hegel; logical form; Frege; Wittgenstein; dialectics; speculative sentences

### 1. Introduction

Hegel’s concept of logic and logical form, known mainly from Marx’s or Engels’ formulation of *dialectical laws* (see [Engels, 1947](#)), seems to be, if not an obscure deviation, then at least a self-proclaimed rival of

formal logic. And this is basically how even favorable readings of Hegel's logic, such as Priest's paraconsistent approach, treat it up to the present day in their search for historical predecessors (see, e.g., [Norman, Priest and Routley, 1989](#); [Priest, 2006](#)). Besides that, there is an approach developed from the dialectical side of the fence that tends to think of the relation between Hegel's logic and formal logic in terms of some super-logical structure analogous to Non-Euclidian and Euclidian geometries. Formal logic is not a rival of dialectical logic but relates to it as an approximation to its refinement, like a straight line to a curve.

The inadequacy of both readings is easily discovered if confronted with Hegel's own remarks on logical form within his more general critique of what he calls "formalism". Thus, in the introduction to his *Science of Logic*, one reads the following:

[...] the emptiness of the logical forms lies rather solely in the manner in which they are considered and dealt with. Scattered in fixed determinations and thus not held together in organic unity, they are dead forms and the spirit which is their vital concrete unity does not reside in them. ([Hegel, 2010b](#), p. 27)

According to this, there is no intrinsic problem with the concept of formal logic and its "fixed determinations" that would force us to change them or embed them into some superstructure, but rather with the ways in which these determinations, or *logical form*, are treated.

Based on this observation, it can be argued that what Hegel develops in his *Science of Logic* is not a new form of logic as science, but a philosophical investigation of what the "logical form" is. And that's exactly right, except for the separation of these two issues. In fact, it is precisely this separation that, according to [Hegel \(2010b, p. 32\)](#), makes the concepts of logic "dead forms" and the inferences based on them a mere "children's game of fitting together the pieces of a colored picture puzzle."

What he offers instead, under the very name of the "science of logic", is an enterprise aimed at the *adequacy* of the logical form. This consists neither in designing new formal systems nor in merely sticking to the old ones, but in adjusting both of these "fixed determinations" with an adequate *attitude* described as a conceptual "closure". I believe that such a closure — captured by Hegel's concept ([2010b, p. 751](#)) of the Absolute and the accompanying metaphor of the "circle of circles" — is roughly the same thing that [Wittgenstein \(1961b, p. 2\)](#) refers to when saying that logic must be able to take care of itself.

## 2. What is Irreplaceable?

As the founder of modern logic, Frege would seem to be the best candidate for a general orientation as to what exactly the logical form is, and indeed he provides such a determination. Surprisingly, he does that in a Hegelian double-edged fashion. Logic cannot be entirely formal, says Hegel (2010b, p. 24), “since thinking and the rules of thinking are supposed to be its subject matter, in these logic already has a content specifically its own.” In the same vein, Frege remarks that:

No science is completely formal; but even gravitational mechanics is formal to a certain degree, insofar as optical and chemical properties are all the same to it. To be sure, so far as it is concerned, bodies with different masses are not mutually replaceable; but in gravitational mechanics the difference of bodies with respect to their chemical properties does not constitute a hindrance to their mutual replacement. To logic, for example, there belong the following: negation, identity, subsumption, subordination of concepts. And here logic brooks no replacement.  
(Frege, 1971, p. 109)

What the *form* represents for Frege is an a priori part of our knowledge, but *relativized* to its specific region such as gravitational mechanics or chemistry. In gravitational mechanics, e.g., the body’s *motion* does not need explanation *per se*, as in Aristotle’s system, but only if it makes a deviation from its straight direction or when it accelerates. In these cases, and only in them, one is to assume the intervention of external “forces”, as expressed in the equation  $F=ma$  versus the Aristotelian  $F = mv$ . Hence, in Newtonian mechanics, the motion of the body as well as its localization in Euclidian space belong to the frame of reference which is prior to any observation and therefore not replaceable by it.

Because Frege, unlike Kant, thinks in linguistic terms, the logical form is determined by the parts of language that are *not replaceable* and thus a priori with respect to the given body of linguistically framed knowledge. In this, Frege seems to be following Bolzano and his definition of *universal truth*:

Let the proposition  $A$  be such that all the propositions which can be generated from it are true, if the ideas  $i, j, \dots$  alone are considered variable, and if only objectual propositions may be formed. Then the degree of validity of  $A$  with respect to  $i, j, \dots$  is the largest possible, i.e., it equals 1, and we can call the proposition *universally* or *fully valid*.  
(Bolzano, 2014, p. 57, § 147)

There are three points worth mentioning here. First, Frege's relativization of the form is quite consistent with Bolzano's (2014, p. 57, § 147) observation that the universality of propositions is always relative to their *form*, where by *form* "is meant the collection of all propositions, which differ from  $A$  only in the ideas  $i, j, \dots$ ". Second, Frege apparently shares Bolzano's insight that to achieve universality some parts of the sentences representing their form must be irreplaceable, i.e., fixed, otherwise no universal truth could arise. And third, according to both, there is a specific kind of universality, namely the logical one, requiring that the given irreplaceable parts are of a logical nature.

Unlike Bolzano (2014, p. 59, § 148), though, according to whom "the whole domain of concepts belonging to logic is not circumscribed so sharply that controversies could not arise at times", Frege is specific about these irreplaceable parts, mentioning explicitly "negation, identity, subsumption, subordination of concepts". And it is undoubtedly this *third point*, i.e., Frege's ability and willingness to specify the nature of the logical vocabulary and fix it, that made him, not Bolzano, the founder of the modern logic.

### 3. Paradox of Universality

The general problem with the logical form, as exemplified by Frege, seems to be this: on the one hand, it should capture *universality* in terms of those parts of language that are replaceable *salva veritate*, but on the other hand, it must violate this universality because the fixed parts are something *particular* and, as such, belong to the content of logic rather than to its form. Hence, the very idea of logical vocabulary, if not utterly nonsensical, seems to be burdened with paradox. Let me call it the *paradox of universality*.

Frege only underscores this paradox's existence with his particular choice of fixed, irreplaceable parts of language. In the quote above he already mentioned some, namely "negation" and "implication", the latter being the basis of both subsumption and subordination. But he conspicuously omitted his most important contribution to the subject, namely the *universal quantifier* ( $\forall$ ), optionally supplemented by the *existential one* ( $\exists$ ). The obvious reason for this silence is that, with respect to replaceability, the quantifier introduces a serious ambivalence:

1. As a logical term it must be fixed, but its very meaning of something “universal” exploits the concept of replaceability so to say from the *inside*. If true, the proposition  $(\forall x)A$  refers to universal replaceability with respect to the variable  $x$ , which makes it universally valid, but not for logical reasons.
2. The logical reasons in the original sense are given only by the replaceability of  $A$ , i.e., from the *outside*.

In modern logic, this situation is handled by different notions of replaceability: the interpretation of logical constants (which provides for external, logical validity) and the evaluation of valuables (responsible for internal, material validity). The result is a strange combination of universality and particularity, this time with respect to the universality itself.

If we ask for what reasons Frege might have risked such confusion, the answer, in my view, has to do with his explicit interests in the conceptual reform of mathematics. In fact, one could argue (see, e.g., [Kolman, 2015](#)) that his “Begriffsschrift” was conceived as an *a priori* of Cauchy’s reform of analysis, which, in an attempt to eliminate the conceptual problems of Newton’s system, systematically deals with multiple quantificational dependencies. In reasoning about continuity, e.g., one could arrive at a valid inference from uniform continuity to pointwise continuity, represented as  $(\exists x)(\forall y)A/(\forall y)(\exists x)A$ . In contrast to its conversion  $(\forall y)(\exists x)A/(\exists x)(\forall y)A$ , this inferential pattern turns out to be universally valid in Bolzano’s sense of universal replaceability of  $A$ , taking into account also the transition from uniform convergence to a pointwise one, etc.

#### 4. On Leaves and Buds

The lesson one can take from Frege with respect to our paradox is this: On the one hand, the paradox results from the particularity and fuzziness of all our concepts, including the logical ones. On the other hand, it is the product of their essential historicity. But perhaps, so the argument goes, this historicity is not only the source of the paradox but also the way to resolve it, for it is the only form of universality that our concepts can have.

It is hardly a mere *accident*, so the argument continues, that the predicate calculus was invented independently by several people (Frege, Peirce, and Peano among them) at the same time that new ways of speaking in mathematical analysis needed to be strengthened expres-

sively. And it is only this *need*, and the *process* by which it was met, that shows what the logical form is without being too formal or formalistic about that, which I believe both Hegel and Frege tried to avoid.

But while Frege adopted a Kantian attitude to logical categories as something simply given, Hegel radicalized this transcendental approach. Not only does the human mind constitute and reconstitute its own object, changing it accordingly, but this change must also affect the very categories by which this constitution takes place and which simply cannot be thought of as standing outside this constitution, as “static, dead pigeonholes of the intellect” (Hegel, 1977, p. 80). Before Frege could even begin to talk about logical truth he had to fix those irreplaceable parts, for which he deserves to be called the founder of modern logic. And he could not do this out of the blue but in view of the actual situation in the development of mathematics, thus fulfilling the opening passage of *Science of Logic*:

[...] once the substantial [logical] form of the spirit has reconstituted itself, it is of no avail to want to retain the forms of an earlier culture. These are like withered leaves pushed aside by the new buds already being generated at their roots. (Hegel, 2010b, p. 8)

Since logical form and its universality cannot be thought outside their development over time, to avoid the paradox is simply to take this development seriously as a kind of interplay between universality and particularity that leads back to universality, albeit in a new, altered form.

## 5. Bipolarity Radicalized

To decipher this rather cryptic formula, let me return to Hegel’s claim that “the emptiness of the logical forms lies rather solely in the manner in which they are considered and dealt with”. I have formulated it as a problem of *attitude*. Such a suggestion is not unknown to the modern reader; in fact, one can find it at the heart of Wittgenstein’s *Tractatus* and its idea that logic cannot be talked about but only *shown* by taking a specific attitude towards it.

At the heart of this differentiation that links Wittgenstein and Hegel is the concept *bipolarity*, which Wittgenstein articulated in the metaphor of language as *picture*. If something is to be a picture of the world, says Wittgenstein, it must be able both to picture facts truthfully and also to

fail to do so, i.e., to picture them falsely. And since the truths of logic, in their claim to the ultimate universality, cannot meet this, “there are no pictures that are true a priori” (Wittgenstein, 1961a, § 2.225) and the sentences that they try to articulate are meaningless. Logic is not a matter of picturing the world, but provides the scaffolding for it, which includes, e.g., the particular tools we had to use when painting it.

In all this, logic is treated in a Kantian way, as something fixed and a priori given. It is not constituted, but it represents the principle of every possible constitution. As such, it cannot be otherwise. Hegel found this approach inadequate by its own standard, namely the bipolarity of every content. One can indeed, as we do now, speak of the ways of picturing the world, but at the cost of exchanging the old form (of the picture we talk about) for a new one (of the talk we are using). It is only natural to take this observation to its necessary logical conclusion.

Hegel does so by viewing experience as an essentially *negative* enterprise to be developed from the fundamental problem of *conceptual determination*. Determining what some *A* positively is, is not a purely positive process, but an essentially *two-sided*

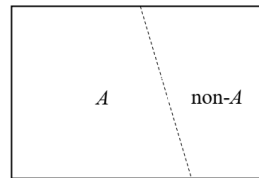


Figure 1.

affair. Graphically, such a determination consists in drawing a boundary between what this *A* is and what it *is not*, leading to the famous “*determinatio est negatio*” clause (Hegel, 2010b, p. 87). On this, as a specific kind of bipolarity, Hegel’s dialectic rests (see Figure 1).

What makes Hegel’s analysis more radical than Wittgenstein’s is the following *self-reflective ascent*. Since we are the ones who draw the boundary, the two-sidedness affects not only both sides of the dividing line, but also the very possibility of drawing it. Thus, on the one hand, every boundary is particular and susceptible to change — as the history of every experience, including logic, shows. On the other hand, without making such a particular, contingent decision, these areas of research would be empty, discarded with every change of concept and with every replacement of old theories (such as Ptolemy’s astronomy or Aristotle’s logic) with new ones (such as Newton’s physics or Frege’s logic) that will then be replaced later (by Einstein’s physics or some non-classical logic). This makes the decision universal and necessary.

It is this mutual balancing between *conceptual anarchism*, which denies the existence of any fixed differentiation, and *conceptual dicta-*

*torship*, which regards some differentiations as irreplaceable, that lies behind Hegel's *triad* of thesis, antithesis, and synthesis. Against this background, what Frege arguably did with respect to the paradox of universality was contemplating such a triad by noting the fluidity of the logical form, as implied by the relative difference between replaceable and irreplaceable parts of language. In the end, however, he decided to hold fast to the one side of the dilemma, which is the dogmatism of parts that "brook no replacement". Wittgenstein, like Kant before him, did not have a problem with this move. He merely pointed out that one cannot talk about it without going in the opposite direction. His remedy was the prohibitive strategy of not talking about logic at all.

## 6. Three Levels of Logic

With Hegel's historical approach the opposite suspicion, of course, arises: Does it not lead to a complete abandonment of logical form, i.e., to some kind of anarchism? And our answer is negative: for Hegel, as the above quotation shows, does not want to abolish the concept of formal logic but only adjust it by an attitude that makes it adequate. The traditional logical systems, however particular, are not *logics* by accident, but by employing a concept of *universality* that, though being particularized in one sense, remains universal in another. This kind of universality, let us suggest, corresponds to those features of *discursivity* that are independent of their realization in this or that field of research or national language.

Thus, e.g., one can employ the concept of hypothetical conditional  $\rightarrow$ , arguing, as Brandom has influentially done, that it stands for a universal feature of every language to make inferences, i.e., to organize mere sentences into some larger interconnected whole. Similarly, negation  $\neg$  would represent the fact that sentences within a language must be incompatible with other sentences if we are to have language as we know it.<sup>1</sup> The danger of such elaborations is that one might easily *over-specify* them, as Frege did, first in the eyes of Brouwer and his intuitionist followers. For them, classical laws such as  $\neg\neg A \rightarrow A$ , based on the classical determinations of  $\rightarrow$  and  $\neg$ , are not universal enough to capture the situation in mathematical reasoning. Similarly, for Brandom (2000, pp. 87–88),

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<sup>1</sup> For a detailed discussion, see (Peregrin, 2014).



Frege was too specific in regarding inference from  $A$  to  $B$  as monotonic, i.e., remaining valid for extending the premise  $A$  by an arbitrary  $C$ .

From a higher perspective, though, such over-specifications cannot be avoided if we want to put the logic to some use. The benefit is that they can go well beyond their origin and lead to new practices and areas of research, such as metamathematics or theoretical computer science in Frege's case. As such, these practices may not be at odds with the universal nature of logic, but in harmony with it in a more radical sense, in which universality *recreates* itself through particularity, absorbing new and so far inconceivable cases of content.

It is this historical interplay of universality and its particularization that leads to universality again, that lies behind Hegel's three levels of logical thinking:

In terms of form, the logical domain has three sides:

- ( $\alpha$ ) *the abstract* side or that of the *understanding*,
- ( $\beta$ ) *the dialectical* or *negatively rational* side,
- ( $\gamma$ ) *the speculative* or *positively rational* side.

(Hegel, 2010a, p. 125, § 79)

Importantly, and consistent with our previous comment, these levels do not represent independent domains, but three attitudes to the one body of logic. The attitude of ( $\alpha$ ) deals with the fixed determinations, capturing those features of discursivity that we must share when using the language as language. In the attitude of ( $\beta$ ), one considers that fixing something makes it particular and therefore incompatible with the very concept of universality that the logical form was about to employ. Because of this, any logical system is too limited and will be replaced by another. Hegel finds a positive counterpart to ( $\beta$ ) in the attitude of ( $\gamma$ ), the so-called *speculative logic*. Its aim is to provide a *closure* that will make the logical form employed in ( $\alpha$ ) and ( $\beta$ ) adequate. It should also, e.g., explain why Aristotle's or Frege's systems, despite their differences, are contributions to the *same* enterprise.

## 7. Speculative Sentences

The required closure of ( $\gamma$ ) is to be imagined as a certain final determination of universality captured in the interplay of ( $\alpha$ ) and ( $\beta$ ), which corresponds to their conceptual synthesis. Hegel is well aware that such a synthesis is hard to specify in plain words because on the surface one

uses the same language throughout. That's why, in his phrasing, the speculative or "philosophical" sentence

[...] evokes the common opinion about both the usual relationship between subject and predicate and the customary procedure of knowing. This procedure and common opinion about such a procedure destroys its philosophical content. Common opinion then learns from experience that it means something other than what it took itself to have meant, and this correction of its opinion compels knowing to come back to the proposition and now to grasp it in some other way.

(Hegel, 2018, p. 40, § 63)

To understand better what Hegel is saying here, let us replace his own examples of speculative sentences like "God is being" or "Truth is the whole" with their modern alternatives, such as "The set of all sets is the largest set that exists". What is of interest here is not their negative, confusing side, but its impact on the concepts employed: when we speak of the set  $V$  of all sets, we are confronted with the fact that it must be larger than it is, given the existence of the set of all its subsets  $P(V)$ , which by Cantor's theorem must be larger than  $V$ . The paradox leads us to rethink what the set can be, or how talk about them is structured in its true logical form.

As such, "speculative" sentences are to express, in a perspicuous and positive way, the reflective ascent associated with the negative nature of our experience. If adequate, this negativity must be applied to itself, not only in acknowledgment of the existence of the other side of any difference, but also of the other side of this differentiating itself. The first consequences are as follows: Negation as determination requires that in order to determine what  $A$  is, there must be something outside of  $A$  that it is set against. However, in the case of the utmost totalities, such as the set of all sets, there is by definition nothing outside, which leads to the classical antinomies of pure reason.

The Kantian and Wittgensteinian way of dealing with them is simply to remain silent, thereby acknowledging the problem of  $(\alpha)$  without being able to rectify it in an adequate way. Hegel takes this approach one step further by noting that the differentiation occurs anyway, but not by overstepping

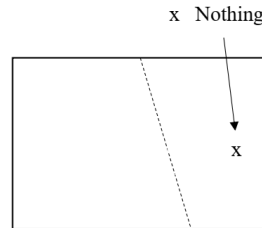


Figure 2.

$A$  into nothing (of which we must remain silent), but by bringing this nothing, so to speak, into  $A$  by splitting it into proper and improper parts (which we are forced to talk about, albeit in some improper ways) — see Figure 2.

This is, in fact, what happens when we distinguish between *proper sets* and *classes*, or between *mere appearances* (such as fictitious forces, e.g., centrifugal force) and *real phenomena* (e.g., gravity). These are not absolute differences, as the second example makes clear in its dependence on the choice of inertial frame, but result from the bipolarity of our experience.

## 8. Constitutive Exception

What I propose now is to see the speculative part of the logical project as expressing the *subversive* quality of language as one of its most universal, and thus logical, features. This subversiveness stems from the application of the underlying negativity of every linguistic expression — the ability “to destroy its content” — to the negativity itself, through which, in a perspicuous way, “it learns that it means something else and grasps itself in another way”.

In “common opinion” one often encounters such speculative attempts at perspicuity in the concept of the so-called “constitutive exception”, as in the saying “the exception proves the rule” and the like. I propose to use this concept as the expression of the most universal form that such subversiveness of language gives us, along the following lines: *Constitutive exception* is something that, by being outside a universal domain, has, by violating its universality, an improper quality. At the same time, though, it serves as a means of making that domain proper. It is therefore constitutive for this domain and, as such, more proper than the domain itself.

I believe that Slavoj Žižek (2013, p. 47), following Lacan, refers exactly to this speculative phenomenon when using the formula  $(\forall x)A/(\exists x)\neg A$ , not just like that, but in an explicit opposition to the rule  $(\forall x)A/(\exists x)A$  of the Aristotelian square. His aim is clearly not to introduce some alternative concept of logical truth, but to articulate the difference between our treatment of totalities in the manner of  $(\alpha)$  and  $(\beta)$  against the manner of  $(\gamma)$ . Whereas Aristotle’s and Frege’s logics typically consider totalities that have already been established as proper parts of some larger whole, in which apparently  $(\forall x)A$  leads to  $(\exists x)A$ ,

Žižek's rule affects the constitution of totalities as such, in which the boundary meets not other totalities, but pure nothing. This can be expressed by employing speculative inferences like: if everything is an appearance (class, dream, counterfeit), then there must be something that is not (set, reality, original), otherwise the very concept of appearance would lose its sense. Thus, in all ( $\alpha$ ), ( $\beta$ ) and ( $\gamma$ ) we relate to the same enterprise in a complex, multiperspectival way.

### 9. Master, or Servant's Servant

In order to see the concept of "constitutive exception" as a central category of speculative logic, one must first follow Hegel's logical exegesis throughout his *Science of Logic*. This means nothing less than to take seriously the *historicity* of our concepts, i.e., to see them as evolving by way of determination that, in accordance with its underlying negative nature, always takes the opposite direction from the previously adopted course. In this evolutionary setting, the subversive quality of language manifests itself as the *discursive irony*, most famously put forth by Hegel in his dialectic of master and servant.

To cut a long story short, the dialectics is a *structured narrative* of two agents in which one of them, the servant, is initially only seen as an arbitrary element in the other's achieving mastery (see Figure 3). The master is reciprocally seen (or rather sees himself) as a kind of positive, independent institution, much as one tends to think of truth as independent of its negative variants: untruth, failure, or mistake. In retrospect, however, this cannot be so.

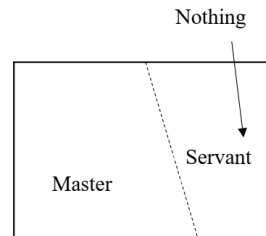


Figure 3.

One cannot be a master without being acknowledged by others, without having servitude as part of his or her own nature. It is in this need for recognition that the master is revealed to be the servant's servant. And by analogy, no concept, including the very concept of truth, can be defined in purely positive terms, as correspondence theory would have it, because such positivity is at variance with the historicity of our knowledge, with the fact that our theories are only provisionally true to be

replaced by other theories later, etc. Truth, as [Kojève \(1969, p. 187\)](#) famously argues, makes sense only as a corrected mistake.

The constitutive exception captures the discursive irony of the whole situation quite well. Like the servant in the story, the exception first appears as a mere accidental feature of the standard case, while in the second step it turns out to be part of this standard's constitution, i.e., more standard than this standard case itself. The task before us, then, is to explain how this apparently unstable narrative can be turned into something positive without skeptical consequences. And this is precisely the point of a *speculative* reading of the master and servant story.

## 10. The Second Plot Twist

In order to achieve the speculative closure, which is the more or less happy ending of the whole narrative, we must improve it by a few more steps. In the first, we need to reject the narrative's usual reading made famous by Marx and Engels in their idea of a classless society. In this, the story ends with the mutual annihilation of the antagonistic parties, where either nobody is master or slave anymore, or everybody is both. But [Hegel \(2007, p. 161, § 435\)](#) himself explicitly rules out such an ending, pointing out that the underlying ironical plot twist is twofold:

1. not only are the roles of both agents reversed, i.e., the master is the servant's servant and *vice versa*,
2. but, more importantly, the master's mistake is the catalyst for the entire process, without which this process could not even have happened.

This does not just mean that we appreciate the importance of masters and servants in history, but that we consider these roles to be an essential part of our present and future. The only thing that needs to be discussed is what form their relation should take.

Phrased speculatively, the exception should not blend in with the anonymous mass of standard cases, but should be preserved in its constitutive role as a dynamic part of the whole system. Thus, e.g., modern democratic forms of government have not abolished the difference between masters and servants — there are still bosses, chairmen and chairwomen, and prime ministers — but they have conditioned the superior's authority by the corresponding responsibility to his or her inferiors, and

*vice versa*. The problem of Marx's reading was probably his tendency to think mostly in *quantitative* terms, concluding that since exceptions — as in the case of workers, employees, or citizens — are too many and their number usually grows, they cannot be considered exceptions.

However, the asymmetry in question has a different, *qualitative* nature, which comes from our essential sociality. All our discursivity and the distinctions we make take place in a community of agents that is symmetrical only retrospectively, once the original subjectivity of experience has been suppressed or universalized by treating one's own (superior) point of view as shared with any other (inferior) subject. The problem is if one interprets this "symmetrical" step as leading to *objective* knowledge and forgets that it is still subjective in nature, but substantially modified by the identification of the (superior) Me with the (inferior) Us. This equation, in its complicated structure, is also what Hegel (2018, p. 108, § 177) uses in his very own definition of Spirit.

### 11. In Lying We Are More Truthful

Rather than being some supraindividual entity in which the differences of the individual participants are neglected, the Spirit is a community of people who have made their universality part of their particular nature. In this, they depend on the universality of language, which Hegel (2018, p. 376, § 652) suitably calls the existence (*Dasein* – Being-Here) of the Spirit.

Language is universal, not only due to the strange nature of its words which refer to many different things that are not here and now when we mention them — as Hegel's (2018, p. 63, § 101) experiment with writing down "Now is daytime" while waiting for night should demonstrate — but also because it is shared by many people. As such, Hegel says, language *lies* deliberately by violating the particularity of things and people. But in this lying, he adds, language is more truthful and allows for knowledge in the proper "bipolar" sense:

In language, we immediately refute what we *mean to say*, and since the universal is the truth of sensuous-certainty, and language only expresses this truth, it is, in that way, not possible at all that we could say what we *mean* about sensuous being. (Hegel, 2018, p. 62, § 97)

This phrasing makes us aware that language is speculative all the way down, in the sense of the discursive irony mentioned above, and

that this speculativeness stems from the intrinsic sociality of our words. This leads us to the most general, purely “logical” reading of what the constitutive exception is. In talking, one might say, I always address the other as a negative part of my experience or as an exception that I must learn to take seriously without losing my own stand. Only in this way can I achieve universality by belonging — through shared dialogue — to the community of speakers.

Thus, it is the *other* who stands for the always present constitutive exception that, by negating my standpoint, makes it more determinate or makes it determinate at all.

Contentwise, of course, I often have to *give up* my own opinion and *adopt* the opinion of others, or persuade them to adopt the opinion of mine. But the formal difference between holding my own position and acknowledging theirs is present no matter what I end up doing. Because of this basic sociality — the division of the self into an individual and a social side, or, as Nietzsche (1995, p. 59, § 57) puts it, of treating us as *dividua*, not individua — we cultivate *indirect forms* of representation, as systematically exploited and developed in the arts. Recently, particularly in pop-culture (such as South Park, House MD or House of Cards), we have even come to question and ridicule the most basic parts of our ways of life. And this is not because we no longer believe in these ways, but precisely because we do while at the same time we are aware of their bipolar nature. To deal with it, we have adopted a speculative form of irony as our own, for the reasons so beautifully expressed and advocated already by John Stuart Mill in his essay *On Liberty*.<sup>2</sup>

## 12. The Closure

Against this background, we can conclude that modern logic, despite its successes and moments of glory, has not yet reached its speculative phase and finds itself somewhere between phases ( $\alpha$ ) and ( $\beta$ ). Here, it can rave about logics and their plurality in positive terms that simply disprove themselves. Steps in the right direction of ( $\gamma$ ), though, have been taken in several attempts to treat the basic sociality seriously, in the dialogical or game-theoretic approaches of Lorenzen and Hintikka. Their problem was that they still hoped to find some ultimate “rational”

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<sup>2</sup> See particularly Mill’s summary of four points for respecting free speech (Mill, 2003, pp. 118–120).

rules by which all the discursivity could be governed.<sup>3</sup> And this simply means suppressing its negative side, represented by always disagreeing with each other, with the inevitable consequence of reducing logic to “a children’s game of fitting together the pieces of colored picture puzzle”. The same applies to the various attempts to formalize Hegel’s dialectical enterprise, ignoring that they reduce it to the basic level of ( $\alpha$ ).

Hegel elaborates on this point by comparing the rules of logic with grammatical rules that, on first encounter, appear as “dry abstractions, arbitrary rules, quite in general a disconnected aggregate of definitions that have no other value or meaning than what they immediately signify”. But once we have mastered our language in multiple ways, Hegel (2010b, p. 36) adds, we begin to “feel in the grammar of the language the spirit and culture of a people; the same rules and forms now have an enriched, living value. In the medium of the language, [we] can recognize the expression of spirit as spirit, and this is logic.”

The role of logic, again, is not diminished here, but embedded into what Hegel (2010a, pp. 299–300, §§ 236–237) calls “life” — an *absolute idea* that understands itself not only in its projective relation to the world, as the positive sciences and their correspondence paradigm would have it, but understands itself as a kind of *hermeneutic circle*. It is circle, as we have already mentioned in connection with Frege, the universality of language recreates itself by means of its particularization, in a similar way in which we arrive at universal concepts from some individual cases in order to develop these concepts later by their subsequent application to other individual cases.

Hegel repeatedly compares this process to the process of *aging*, in which youth, representing the phase of ( $\alpha$ ), clings to preconceived ideas and the rationality associated with them, much as the musical apprentice clings to the musical score.<sup>4</sup> The old person, on the other hand, still uses the score, but does so not only to identify mistakes and deviations from it, but also to incorporate them, once made, into the musical texture, i.e., into the larger whole of musical life. The difference between old age and youth is therefore not just a matter of content, but amounts to

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<sup>3</sup> See also Stekeler’s explicit critique of Lorenzen in (Stekeler-Weithofer, 1986, part iii).

<sup>4</sup> The examples Hegel gives are not musical, but moral or religious (Hegel, 2010b, p. 37).



the ability to *improvise*, i.e., to treat content dynamically. In this way, adulthood becomes an adequate representation of the Absolute.<sup>5</sup>

In order to understand this hermeneutical point properly, I propose to take a closer look at the concept of improvisation, roughly along the lines suggested by Georg W. Bertram and Michael Rösenberg in their recent book *Improvisieren!*. As they argue, even in jazz, which is often used as a natural model of free action as opposed to classical music's preference for sheet music, improvisation does not mean that we make random moves once an established set of rules fails us, but rather a sophisticated interaction between constitutive norms and their situational actualization (see Bertram and Rösenberg, 2021, p. 30). Such improvisation, then, is inherent in any linguistic practice, including the usual distinction between a particular *speech act* and its universal *content*, which is, however, just another name for a (more fixed and schematized) action.

Such action is essentially linked to the process of habituation, which is why Hegel's *age* metaphors qualify as proper logical categories rather than something that has been brought up due to the lack of a serious argument. As Bertram and Rösenberg pace Peirce argue, habits are not mere stereotypes blind to deviations, but ways of making sensitivity to deviations automatic. They are "dynamic routines". In this spirit, I now propose to look at the logical forms in their adequate reading as the most general *routines*, sensitive to the fact that we often fail, and yet are able to deal with that failure in a constitutive way. It is thus the attitude towards failure, not its eventual content, that makes us rational beings in Hegel's sense, which is also Wittgenstein's sense of rationality being able to take care of itself.

**Acknowledgments.** Work on this paper has been supported by grant No. 23-05448S of the Grant Agency of the Czech Republic, "Fallibilism and Its Immanent Structure".

## References

Bertram, G. W., and M. Rösenberg, 2021, *Improvisieren! Lob der Ungewissheit*, Stuttgart: Reclam.

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<sup>5</sup> (Hegel, 2010a, p. 300, § 237): "[...] the absolute idea is comparable to the old man who says the same religious sentences as the child does, but for the old man they have the meaning of his entire life."

- Bolzano, B., 2014, *Theory of Science*, Vol. II, transl. by P. Rusnock and R. George, Oxford: Oxford University Press.
- Brandom, R., 2000, *Articulating Reasons. An Introduction to Inferentialism*, Cambridge, MA: Harvard University Press.
- Engels, F., 1947, *Anti-Dühring. Herr Eugen Dühring's Revolution in Science*, transl. by E. Burns, pages 5–312 in K. Marx and F. Engels, *Collected Works*, Vol. 25, Moscow: Progress Publishers.
- Frege, G., 1971, *On the Foundations of Geometry and Formal Theories of Arithmetic*, transl. by E.-H. W. Kluge, London: Yale University Press.
- Goethe, J. W. v., 1988, *Maxims and Reflections*, transl. by E. Stopp, London: Penguin Books.
- Hegel, G. W. F., 1977, *The Difference Between Fichte's and Schelling's System of Philosophy*, transl. by H. S. Harris and W. Cerf, Albany: State University of New York Press.
- Hegel, G. W. F., 2007, *Philosophy of Mind*, transl. by W. Wallace and A. V. Miller, Oxford: Clarendon Press.
- Hegel, G. W. F., 2010a, *Encyclopedia of the Philosophical Sciences in Basic Outline. Part I: Science of Logic*, transl. by K. Brinkmann and D. O. Dahlstrom, Cambridge: Cambridge University Press.
- Hegel, G. W. F., 2010b, *The Science of Logic*, transl. by G. di Giovanni, Cambridge: Cambridge University Press.
- Hegel, G. W. F., 2018, *Phenomenology of Spirit*, transl. by T. Pinkard, Cambridge: Cambridge University Press.
- Kojève, A., 1969, *Introduction to the Reading of Hegel. Lectures on the Phenomenology of Spirit*, transl. by J. H. Nichols, Ithaca: Cornell University Press.
- Kolman, V., 2015, "Logicism as making the arithmetic explicit", *Erkenntnis* 80 (3): 487–503. DOI: [10.1007/s10670-014-9712-z](https://doi.org/10.1007/s10670-014-9712-z)
- Mill, J. S., 2003, *On Liberty*, New Haven: Yale University Press.
- Nietzsche, F., 1995, *Human, All Too Human I: A Book for Free Spirits*, transl. by G. Handwerk, Stanford: Stanford University Press.
- Norman, J., G. Priest, and R. Routley, 1989, *Paraconsistent Logic. Essays on the Inconsistent*, München: Philosophia Verlag.
- Peregrin, J., 2014, *Inferentialism. Why Rules Matter*, New York: Palgrave Macmillan.

- Priest, G., 2006 *In Contradiction. A Study of the Transconsistent*, Oxford: Oxford University Press.
- Stekeler-Weithofer, P., 1986, *Grundprobleme der Logik. Elemente einer Kritik der formalen Vernunft*, Berlin: de Gruyter.
- Wittgenstein, L., 1961a, *Tractatus logico-philosophicus*, transl. by D. F. Pears and B. F. McGuinness, New York: Humanities Press.
- Wittgenstein, L., 1961b, *Notebooks 1914–1916*, transl. by G. E. M. Anscombe, Oxford: Basil Blackwell.
- Žižek, S., 2018, *Less Than Nothing. Hegel and the Shadow of Dialectical Materialism*, London: Verso.

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