Hegel, Modal Logic and the Social Nature of Mind

Paul Redding

## Introduction:

Hegel’s *Phenomenology of Spirit* provides a rich source of ideas for a non-Cartesian philosophical account of the mind as essentially embodied and socially located, but it can seem difficult to develop these ideas in any systematic way into a distinct *philosophy* of mind. First, Hegel’s ideas are presented there more as hints than developed theories, and next there is the *meta*philosophical question of the status of Hegel’s *Phenomenology* itself. Simply put, *phenomenology* is *not* what Hegel considered philosophical science, “Wissenschaft”. It was meant as a path taking a thinker *to* a place from where scientific thought proceeds, first, to the categorical structures of the *Science of Logic*, which in turn are meant to provide the conceptual infrastructure of philosophical thought about nature and then “spirit”. It is in Philosophy of Spirit, of Hegel’s system as presented in his *Encyclopaedia of the Philosophical Sciences*, and in particular, the section of Philosophy of Subjective Spirit labelled “Psychology” that one would expect to find Hegel’s *philosophy of mind*, but in comparison to the *Phenomenology*, Hegel’s “Psychology” is disappointing.[[1]](#endnote-1)

Here I want to suggest a path for developing the *Phenomenology*’ssuggestive ideas that broadly conforms to the demands of Hegel’s system—moving from *logic* in the direction of a philosophy of mind. Hegel’s logic may be understood as an *intensionally* understood *modal* logic, relevant for modeling mental states by drawing on parallels between logical issues of *intensionality* (with an “s”) and psychological ones of *intentionality* (with a “t”).[[2]](#endnote-2) In fact, significant parallels emerge between modern modal logic and Hegel’s subjective logic in that each embrace, in a systematic way, a type of logical *dualism* relating the intensional to the extensional. Moreover, treating Hegel’s logic in this way, I suggest, involves no anachronistic projection of a modern form of thought back onto him. In 1930, C. I. Lewis, who played a major early role in the development of modern modal logic, noted that in contrast to the extensionalist approach to logic characteristic of the British tradition from the time of Boole, logic as conceived in “continental” thought from Leibniz on had been understood “intensionally”, that is, understood in terms of relations primarily conceived among mind-dependent concepts rather than in terms of the relations among the mind-independent *extensions* of those concepts. But Leibniz had in fact experimented with ways of translating intensionally understood judgments into extensionally understood ones and vice-versa, and so did Hegel. Later, ways of applying modal logic to “intentional” contents were suggested by Arthur Prior, another important figure in the re-emergence of modal logic in the 20th century, although the most well-known attempt in this regard was that of Hintikka’s “doxastic” of belief. While Hintikka’s account was clearly influenced by Kantian idealism,[[3]](#endnote-3) both Lewis *and* Prior had been influenced by thinkers with strong *Hegelian* leanings: Lewis by his teacher, the American “absolute idealist”, Josiah Royce, and Prior by *his* teacher, the South-African born John N. Findlay. We should not, then, be surprised to find such linkages between logic and mental phenomena in Hegel, linkages that help to make sense of his attempt to build a philosophy of mind on logical foundations.

My plan is first to sketch in section 1 the picture found in Hegel’s *Phenomenology of Spirit* in which individual minds are conceived as recognitively linked into inter-subjectively patterns of holistically conceived “spirit”. This will then provide a framework for understanding the significance of the type of logical dualism that Hegel shares with contemporary modal logicians, argued for in section 2. The plan is to use this dualism to show how individual minds might be linked by shared intentional contents but differentiated by differences in individual attitudes to these contents. In the final section I will attempt to find in contemporary modal logics some resources for developing the *Phenomenology*’shints about *geistig* systems of interconnected minds.

## 1. Clues for Philosophy of Mind from Hegel’s *Phenomenology of Spirit*

The first three chapters of Hegel’s *Phenomenology of Spirit*,constituting the section “Consciousness”, commence in a way that is familiar from the type of epistemological/psychological approaches found in early modern philosophy. An opening move effectively asks the epistemological question “Of what can one be certain?” and the three chapters of this section consider three unsuccessful attempts to characterize objects of consciousness that can be known with certainty. First, in “sense-certainty”, the mind is conceived as immediately acquainted with atomic sensory contents in a way that resembles early empiricism or Russell’s later picture of the mind’s acquaintance with atomic sense-data. But sense-certainty is unable to live up to its promise of immediate certain *knowledge* and collapses, to be replaced another model, “perception”. Here perceptual knowledge is conceived more along the lines of direct awareness of everyday worldly objects—“medium sized dry goods”—perhaps closer to a model of direct perceptual realism. However, following a similar fate to that of sense-certainty, perception too collapses, and is replaced by a third mode of cognition, “the understanding” in which the contents of consciousness are understood as actively *posited* by the mind rather than passively *received* by it, as when the scientific mind posits underlying forces to explain regular patterns found *within* its experience. But it in turn too suffers a similar fate. All in all, the take-away lesson of these chapters is that the early modern *Cartesian* starting point is incapable of accounting for any genuinely *intentional* relation between mind and world. Furthermore, at the end of the chapters it has emerged that the mind’s relation to any object is dependent upon an over-arching *self-relation*, an idea familiar in Kant, and especially Fichte, and with this the theme shifts from that of *consciousness* to this self-relation, *self-consciousness*.

It is in the context of the following Chapter 4, “Self-Consciousness”, that we encounter the idea that has captured the attention of many Hegel commentators in the 20th century—the idea that the representational or intentional capacities of a subject depends upon that subject’s existence within a relationship to others that Hegel calls “*Anerkennung*”, “recognition”. Self-consciousness, we are told, “exists in and for itself when, and by the fact that, it so exists for another; that is, it exists only as something recognized or acknowledged [*anerkannt*]” (Hegel 1977, § 178). Such acts of recognition are, it would seem, the very stuff out of which “spirit” is constituted and differentiated from nature.

Hegel introduces this theme in the context of the much-discussed “master–slave” dialectic, in which a life-and-death struggle between two living beings becomes resolved into a relatively stable normative and institutionalized form of life, in which the agents act out the linked functionally defined roles of master and slave.[[4]](#endnote-4) Within such a context acting and acknowledging are inseparable. For example, acts cannot be identified *as* slavish without there being someone else *for whom* those acts are done. To act *as* a slave simply *is* to acknowledge some other *as* one’s master, and to acknowledge oneself as their slave. With this simple model we are presented with a picture of an emergent spiritual realm as one of interconnected individual “I”s within a “we” that exists in and is dependent upon the living world, but is not reducible to it nor understood in terms of its categories.

In such an approach, a role for *language* would seem obvious (e.g., Bernstein 1984).[[5]](#endnote-5) A slave acts so as to satisfy his master’s desires, and we might think that any such form of social life requires at least the capacity for the master to *convey* the determinate *contents* of his desires to his slave in some way that carries an effective *force*. A picture with features like Wittgenstein’s well-known “builders’ language game” from the *Philosophical Investigations* (1953, §§ 2–21), might come to mind, blending “language game” and “form of life”. However, the *reciprocity* required for Hegel’s *Anerkennung* seems to point to complexities beyond that simple model.

For Hegel, the *Anerkennung* relation is *essentially* reciprocal, and in conformity with this it might be thought that the dynamics of linguistic interaction *does* suggest an active role for the slave. A speech act will be meant to bring about its effect *in virtue of* the recipient’s *understanding* ofthe speaker’s expressed intention, rather than simply evoke something like a conditioned response. In conformity with this condition Hegel treats the actual, non-reciprocal master-slave relation as in contradiction with essential features of the recognitive relation it instantiates. Treating the slave as a type of will-less *object*, in commanding the master nevertheless implicitly recognizes the slave as a cognitive “subject” able to understand and act on his commands. Developed along these lines, the reciprocity presupposed might suggest more the type of account of language games found in the work of Wilfrid Sellars, who stressed the *non*-natural authority of the speaker as always potentially open to the asking for *reasons* for its acceptance by the interlocutor (Sellars 1997). Recently, such an account has been developed by Robert Brandom (1994), who uses it as a framework for his interpretation of Hegel’s *Phenomenology of Spirit* (Brandom 2014). While related, my approach will vary from Brandom’s, however, as Brandom reduces issues of psychological intentionality to a linguistic semantics built upon an account of language use, effectively reducing philosophy of *mind* to philosophy of *language*. In contrast, I will appeal to the irreducible role for Hegel of experience and its phenomenal dimension—the idea that consciousness is such that there is something “that it is like” to be that consciousness.[[6]](#endnote-6)

In fact, this feature of consciousness had been stressed by Prior’s teacher, the *Hegelian* (Findlay 1958), John Findlay, who in his phenomenological writings had discussed “the ways in which frames of mind may vary independently of what they are *of* and that show that there is something *more* to such frames of mind than what they are *of*” (Findlay 1961, 47). Following Husserl, Findlay had distinguished between “fulfilled” and “unfulfilled” intentional states, with “presence to sense” the paradigm of the former (52). But not all intentional content is “present” in this sense, and even in “the most primitive experience” there is to be found the consciousness of the “not yet” and “no longer”. In short, from the perspective of the present, the past and future exist more as no-longer fulfilled and yet-to-be fulfilled “posits”, exemplifying a play of distinctions that, he adds, is able to be “crystalized into the clear concepts of a modal logic” (64).[[7]](#endnote-7) My approach will be to follow Findlay’s focus on the modal dimension of this play of intentionality and phenomenality, and to portray it as essential to the articulation of the intersubjective recognitive relations linking minds into “spirit”. In turn, this intentional polarity between the (fulfilled) *given* and (unfulfilled) *posited* states will be grounded in an *intensional* (logical) dualism that Hegel shares with modern modal logic. Here, the master–slave parable might be useful for bringing these features into view.

In the *Phenomenology of Spirit* master and slave are meant to exemplify primitive one-sided examples of self-conscious beings *for whom* certain things in the world can exist with determinate identities and qualities. It will be the inadequacy of the master–slave relationship that draws attention to the necessary condition for the emergence of genuine self-consciousness—the *acknowledged* reciprocity of the recognitive relation. Reciprocity necessitates that each member must, in some way, internalize the perspective of the other, but this cannot be acknowledged within the institution of slavery. Nevertheless, the master–slave context shows a basic advance over the earlier individualistic accounts of consciousness, in that it presents us with an obvious difference *between* the subjects *for whom* objects can be common objects of consciousness, a difference, I suggest, that will be reflected in how those objects will be presented to each of the self-consciousnesses involved. We might say that the common intentional objects mediating the recognitive relations supporting *self-consciousnesses* must be such as to present different “faces”, “aspects” or “guises” *to* the different self-consciousnesses involved.[[8]](#endnote-8) And if recognition is reciprocal, this difference in turn should be reflected *within* the self-consciousness of *each* self-consciousness.[[9]](#endnote-9)

In Hegel’s parable, the master is a consumer, and the objects encountered in the world are primarily significant in terms of whether they satisfy or frustrate *his own given* desire. Clearly the slave cannot maintain *this* attitude to such objects—in accepting servitude the slave had to *forgo* his own immediate desires for particular things for the sake of satisfying a more general desire for *life*. Thus the slave *refrains* from simply consuming desired objects, and acts *on* them, transforming them in such a way to bring them into conformity with a desire that he knows *of*, but which cannot be his own—the desire of his master. My simple suggestion is that this difference should also be reflected *within* the intentional attitude itself, differentiating what we might think of as *the* *modes of presentation* within which an intentional content—for example, a desired object—stands for each subject. We have already glimpsed some candidates for these different attitudes in the consciousness chapters: the sensory *givenness* of perceived objects and the abstract *positedness* of objects cognized as having explanatory roles. Let’s say a slave prepares a meal for his master, cooking him a fish. In contrast to the sensuous way in which the object of the master’s desire—the mouth-watering cooked fish, promising immanent “fulfilment”, will be present to *him*—that object must have been originally presented to the *slave* as something closer to an “unfulfilled” posit that is simply *aimed at*. As not originally given be simply conceived it had lacked the phenomenality of any actual *immediate* object of sensuous desire. In his dualistic classification of judgments found in his subjective logic in Book III of the *Science of Logic*, we find a logical analogue to such differences in the guises assumed by intentional objects in the *Phenomenology of Spirit*.

## 2. Logical Dualism in Hegel’s Subjective Logic and in Contemporary Modal Logic

In his discussion of judgments in his Subjective Logic, Hegel explicitly rejects any *extensionalist* construal of judgments, and so implicitly confirms an intensionalist outlook. A judgment—*Urteil*—is not to be confused with a mere *Satz*, by which he clearly means a *sentence* considered as conveying information about a particular thing.[[10]](#endnote-10) A *Satz* considered in such an extensionalway—one linking the event of Aristotle’s death to a particular point in time, in Hegel’s example—is neither true nor false, but simply *correct* (*richtig*) or *incorrect* (*unrichtig*). To express an *Urteil*, and aspire to *truth* rather than mere correctness, a *Satz* must play a role in some piece of inferentially articulated reasoning (Hegel 2010, 553), as when one, in countering an opposing view, argues for the date of Aristotle’s death on the basis of evidence.

That the inference or “syllogism” is the “truth” of the judgment becomes explicit subsequently when Hegel generates a series of forms of judgment with different logical shapes that finally transitions into a series of *inference* structures. Running through this series is a recurring distinction between two different understandings of the predication relation appearing in the sentences mediating these cognitive activities: predication understood as the *inherence* of the predicate *in* the subject or understood as the *subsumption* of the subject *under* the predicate. There is no suggestion that either type of predication can be *reduced* to the other, although there *is* the suggestion that one can alternate between these different construals of a single *sentence*, effectively converting a judgment of inherence *into* a judgment of subsumption, and vice versa. This had been a technique utilized by Leibniz, but for Hegel it occurs in such a way that each cycle of translation increases the complexity of the logical structure involved.[[11]](#endnote-11) So rather than resulting in any *reduction* of one form of predication to the other, such translationof one form to the other produces Hegel’s characteristic figure of *Aufhebung*—opposed forms become internally retained and related within “higher” more complex ones. These two forms of predication are characteristic of *intensionally* understood judgments and *extensionally* understood ones, respectively.

For its part, predication as *inherence* is first exemplified in the most primitive form of judgment Hegel treats—the *judgment of determinate being* [*das Urteil des Daseins*]. With thisHegel clearly has in mind a type of immediate and perceptually based “*de re*”judgment about *specific* *objects*, his examples including “the rose is red” and “the rose is fragrant” (Hegel 2010, 558–559). Predication as *subsumption*, by contrast is found in the succeeding *judgment of* *reflection* that will have has a more properly propositional content as in a “*de dicto*” judgment.[[12]](#endnote-12) Elsewhere, Hegel hints that this logical distinction separates Aristotelians and Stoics (Hegel 1995 vol. 2, 255).

The broadly Aristotelian judgment of determinate existence evolves through a string of subforms, starting with the “positive judgment” which shows the surprising logical structure of having a *universal subject term* and a *singular predicate term* (Hegel 2010, 560), a structure that will distinguish *this* judgment form from the opposed subsumptive judgments of *reflection*, which will have show the more conventional *singular* subject and *general* predicate. This first form is clearly relevant to the idea of the judgment expressing some *phenomenally rich* perceptual content. With the idea of the singularity of the *predicate*, such as “red” in “the rose is red”,[[13]](#endnote-13) Hegel clearly intends that the predicate acts in a name-like manner so to pick out the *specific* redness “inhering” in *some specific* rose—we might say *this* *specific* rose’s *specific* *way* of beingred.[[14]](#endnote-14)

But this positive judgment is, Hegel says, “not true” and “has its truth in the negative judgment” (Hegel 2010, 562), and it is this use of *negation* that introduces a new degree of logical complexity. When one says, for example, “the rose is *not* red”, negation will only be taken as applying to the *determinateness* of the predicate, because one does *not* thereby imply that the rose is not *coloured*.[[15]](#endnote-15) Rather, “it is … assumed that it has a color, though another color” (565). Modal notions are thick on the ground here: if a rose *is* red then it is *not* *possibly* yellow, pink, blue, and so on, and were it *not* red, it would *have to be* either yellow *or* pink *or* blue, and so on.[[16]](#endnote-16) With this the predicate “red” has gone from functioning in a quasi-name-like way of picking out some individual instance of redness to designating something like *an area* within a larger partitioned space of possible colours, an area *defined by* its borders, and that will, subsequently, potentially accommodate within it, a multiplicity of *shades of*, or *ways of* *being* red. With this it has become the appropriate type of abstractly universal predicate for a *reflective* judgment.

Given the Hegelian heritage of the modern revival of modal logic, we shouldn’t be surprised to find *there* logical distinctions between contrasting judgment forms that seem close to Hegel’s own. Consider, for example, a recent textbook on modal logic by Blackburn, di Rijke and Venema, which commences with a number of generalizations concerning the nature of “modal languages” which, as in Hegel’s logic, suggest a type of logical dualism in which sentences of such an intensional language are translated into those of an extensional language and vice-versa. Thus on the one hand they talk of *modal languages* as simple yet expressive languages for talking *about* relational structures, but which do so from some particular logical perspective located *within* those structures. But such modal languages cannot be considered as *isolated* formal systems: they need to be related to other symbolic languages, first and foremost, extensions of the “classical” language of first-order quantified predicate logic of Frege and Russell (Blackburn et. al. 2001, xi–xiii). My basic suggestion here will be that we consider Hegel’s two types of predicate structure as playing the same functional roles as found in sentences from these “modal” and “classical” languages respectively.

Modern modal logic had commenced with C. I. Lewis’s constructions of systems of *propositional* logic using the propositional operators of “necessarily” and “possibly” (so-called alethic modality), but the next important phase had unfolded in the 1950s and 60s when Saul Kripke and others had found ways of extending to propositional modal logic the type of mathematically based semantics developed earlier by Tarski and others for classical *non*-modal languages. Kripke did this by conceiving of models in which quantification operated not over sets of objects but over sets of, what he called, *possible worlds*. This allowed Kripke to follow Leibniz in translating *“possibly* p” into the extensional form, “*true in some possible* world”. Kripke went beyond Leibniz, however, in adding a dimension of the analysis in which possible worlds are related in terms of relations of *accessibility*.[[17]](#endnote-17) This move allowed the possible-worlds analysis to be extended beyond merely *logical* possibilities to other modalities, one of which will concern the logic of *mental contents*.

We can get an initial idea of what “accessibility” means by looking to the logic of *tensed* sentences that had been developed by Arthur Prior, and upon which Kripke drew.[[18]](#endnote-18) In tense logic, the role played by *possible worlds* in alethic modal logic is played by *points in time*, and just as a *possible world* can be individuated by all the propositions that are true “at” that world, so too has it been suggested that points of time can be individuated by all the propositions that are true “at” those points. In tense logic “accessibility” relations are paradigmatically conceived in terms of the accessibility of certain points of time (or the worlds existing at those points of time) from some particular point of time, the present. For example, we generally hold that while *temporal points* located in the future *are* accessible from the *present*, those in the past *are not*, but the point about differential accessibility can be generalized to *intentional* states, in the sense that we generally accept, for example, that we can *remember* the past but not the future. It is in relation to such issues in *time* that Hegel becomes relevant, as in his work on tense logic Prior himself had been influenced by a paper on time by his teacher, Findlay (1941). Moreover, there Findlay was responding to work on time by *another* Hegelian, John McTaggart and his well-known thesis of the different “A” and “B” temporal series.[[19]](#endnote-19) Findlay’s broadly Hegelian approach to time provides a helpful model for understanding just what is at issue in the type of logical dualism found both in Hegel and in modern modal logics.

In his paper on time Findlay had noted that it is built into the semantic rules of our language that we talk of events that *will happen*, that *are happening*, that *have happened*, and so on, and that *regular patterns* exist among such locutions. Here, our conventions “are so well worked out that we have practically the materials in them for a formal calculus”, and, he adds, this “calculus of tenses should have been included in the modern development of modal logics” (Findlay 1941, 233 and 233 note 17). This provided the starting point of Prior’s intensionalist development of tense logic in which *all* times are treated in terms of their differential accessibility from the *present* of the utterance. For example, referring to an event as in the future is to imply that *in the future* it *will be* present, and a past event is understood as once *having been* present (Prior 2003, 13–4). One might say that from Prior’s perspective, references to past and future times are *centred* *in* the present, and as what is “present” must always be in relation to *some speaker* whose“present” it is, centred on the perspective of some speaking subject. This in turn is relevant to various intentional states, as these will have analogous temporal dimensions, and a certain type of temporal directedness—issues that Findlay was to explore in his studies of intentionality (Findlay 1961). For example, one can *remember* something in the past, but not in the future, and one can (like Hegel’s slave) aim at bringing about some state of affairs in the future, but not in the past. These facts will express the particular “accessibility relations” in modal logics used to model minds.

That the *truth values* of statements so centred are *dependent* on the time at which they are uttered is a point with which any Hegelian will be familiar from Hegel’s discussion, in *Phenomenology of Spirit*, of the sentence “now is night [*das Jetzt ist die Nacht*]” (Hegel 1977, §95). Were such a sentence true when said, Hegel notes, when written down it would at some later point become *false*.[[20]](#endnote-20) To counter this phenomenon, as Findlay notes, we desire “to have in our language only those kinds of statement that are *not* dependent, as regards their truth or falsity, on any circumstance in which the statement happens to be made”. The allusion here is to sentences in which the time is stated *explicitly*, with say, a date. This seems to free some time referred to (say, “yesterday” or “three hours ago”) from its relatedness to a (changing) “today” or “now”, and from some specific subject for whom it is *today* or *now*. However, while this desire is one “which all our language to some extent fulfils” it is also one which at times we are “inclined to follow to unreasonable lengths” (Findlay 1941, 233).

The contrast between Findlay’s “now-centred” tensed sentences and their “extensional” equivalents involving the naming of a time instantiates that between sentences of the modal and “classical” languages. But Findlay’s resistance to the idea of following this decontextualizing move to “unreasonable lengths”, an attitude repeated by Prior, opposed their attitude to the common way of thinking of this relation in what came to be known as “possible world semantics”. In standard possible-world semantics, the modal language is regarded as a “fragment” of the non-modal “classical language” which is regarded as the more fundamental.[[21]](#endnote-21) But in contrast to this, Prior was to treat “first-order predicate calculus [as] … an artificially expanded modal logic or tense logic” (Prior and Fine 1977, 54).

Prior was particularly opposed to the metaphysical implications of the conventional view. In the case of tense logic this involved, he thought, a type of *platonistic objectification* of temporal points that he found objectionable. A more extreme source for concern, however, had to do with the metaphysical consequences of alethic modal logic. Kripke’s semantics for sentences about possibility and necessity involved quantifying over *sets of possible worlds*, and treating these *extensionally* seemed to imply that one accept the *reality of non-actual worlds* in order simply to give meaning to such sentences. This was a metaphysical consequence that David Lewis, but few others, was willing to accept.[[22]](#endnote-22) For the *intensionalist* critics of Lewis, possible worlds were not concrete alternatives to this world, but abstract non-instantiated properties of *this* world.

All in all, we may say that, qua *intensionalists*, Hegel, Findlay and Prior all resist the reducibility of intensionally understood judgments. I’ll now turn to the consequences of this in the context of a type of modal logic that bears directly on the nature of mental contents, the so-called “doxastic” logic of beliefs.

## 4. Doxastic Logic, Egocentric Logic, and the Notion of *Centered* Possible Worlds

I have suggested that the centering of *tensed* judgments on the now is already implicitly subjective or mind-related. The “now” is always *somebody’s* now. The explicit expression of modal logic in this context is found in the tradition of doxastic logic, the first influential treatment of which is to be found in Jaakko Hintikka 1962 book *Knowledge and Belief*. There Hintikka attempted to model a mind’s states of knowledge and belief with the use of propositional operators “a knows that” and “a believes that”, broadly analogous to the operators of necessity and possibility as originally developed by C. I. Lewis. Along with this, Hintikka proposed an accompanying type of semantics something along the lines of the models Kripke was proposing for alethic modality. Thus a type of possible-worlds approach could be applied such that “Jane believes that p” could be interpreted as “in all possible worlds compatible with what Jane believes, it is the case that p”.[[23]](#endnote-23)

Considered as having a properly propositional content, Hintikkarian belief states would coincide with the reflective or “de dicto” intentional attitudes of Hegel’s logical dualism—one conforming to the logic of subsumptive predication. How then are we to think of any alternative “de re” intentional attitude? In his phenomenological writings, Findlay had treated belief as future directed and as involving anticipations that the world will turn out in experience to be a certain way. “The paradigm case of what we are ready for in believing is provided by the deliverances of sense… If we believe there to be honey in the jar, then we are ready for all the compulsive experiences which would be said to show us the honey in the jar, or which would lead up to or fit in with such experiences” (Findlay 1961, 102). As an intentional attitude, then, propositionally contentful belief would seem to be related to and to presuppose some more immediate intentional state, one with an objectual rather than propositional content. The content of this alternative state might be then thought of as given by judgments characterised by Hegel’s predication as *inherence.* Prior had attempted to capture a logic of such *non-propositionally* articulated contents with his idea of “egocentric logic” (Prior 1968b).

Here Prior had offered as a judgment of egocentric logic, the peculiar “It is paining”, which appears to be a type of extreme and privatised analogue of a contextualized *tensed* judgment like “It is raining”. Perhaps Prior had in mind the idea of making the contextuality of such a judgment explicit with something like “I am in pain”, just as one would make that of “it is raining” explicit with “It is raining *now*”. This might allow a series of objective translations based on regular patterns within such locutions: that is, just as the present tense of “now” can be further related to both past and future “thens”, so might “I” be thought as similarly standing in regular relations to locutions using other personal pronouns such as “you”, “her”, “we”, “they” and so on.[[24]](#endnote-24)

Prior did not develop this idea very far, but an analysis in a similar *spirit* can be found in Robert Stalnaker recent exploration of equivalently egocentric judgments. However, Stalnaker’s analysis may be helpful in a way that Prior’s is not, in that it starts from judgments that allow of a type of *collective* egocentricity—first-person plural “we” judgments rather than “I” judgments. These are the judgments that John Perry has called “essentially indexical” or “subject locating”, and that involve “indexical” items such as “I”, “now”, “here”, “this” and so on, and they are particularly help for us, because they effectively coincide with Hegel’s *judgments of inherence*.

The details of Stalnaker’s analysis in which he adopts but modifies an approach developed by David Lewis for a possible-world semantics analysis for such subject-locating, or “de se”, sentences need not concern us here, but its general features may suggest a helpful way for articulating the complex relations at the heart of that dynamic interaction between minds that Hegel deals with in terms of the notion of recognition that, as we have seen, require ways of representing other subjects *as* subjects (that is, recognizing them as subjects) as well as accommodating both *de re* and *de dicto* forms of intentionality.

Hintikka’s original analysis takes off from the assumption that belief states are typically attributed to others in *de dicto* form, as when one says of Alison that she believes *that* Trump will self-destruct prior to the election. But may not one conceive that others may also share those *de re* states that, in the words of Findlay, *fulfil* reflective states like propositional belief? Thus yesterday we both believed that today would be hot, but today we are both *feeling the heat—*that “subjective” experiencethat fulfils yesterday’s expectation and that’s expressed as “it’s hot”. Shared versions of experiences akin to those involved in Kant’s “judgments of perception” suggest themselves here: there is nothing preventing us *both* feeling the room to be warm or tasting this wormwood to be bitter, as shared physical location can entail shared access to experienced states of the world. More generally we have treated perceptual beliefs are typically centered or located in this way, and, of course, they can be directly shared by those sharing such a location—an idea that seems implicit in Hegel’s treatment, in the *Phenomenology*, of “perception”. Such an idea is fundamental to Stalnaker’s treatment of the “pragmatics” of communication (Stalnaker 2014).

While a shared context might be essential for the communication of those “centered” expressions, the meaningfulness of which *depend* on context, Stalnaker stresses that more than the *facts* of such a shared context are important—such facts must be the contents of shared *beliefs*. Thus, following Paul Grice, he refers to the “common ground” of shared presuppositions forming the necessary background to the dialogical exchange of information (Stalnaker 2014, chs 1 & 2). Moreover, that speakers share this “common ground” is a stronger requirement than that they simply happen to havecertain beliefs in common, as they must share the belief that they *do in fact, share those beliefs*: if Alice and Jane share a common ground, not only must both have certain beliefs in common,Alice must believe *that* Jane has those beliefs, must believe that Jane believes that she, Alice, has those beliefs, and so on. Here, with the idea of beliefs about the world entailing beliefs about the cognitive states of other worldly *subjects*, we enter into Hegelian territory. In Hegel’s terminology, Alice and Jane must *recognize* each other *as* sharing these beliefs.

In fact, Hegel had dealt with a similar form of recognitive relation in his account of the recognitive structure of the *family* in the *Philosophy of Right* (Hegel 1991, §§158–81). Subjects in intimate social relations will be bound together by *shared beliefs* about the world—beliefs that typically have a type of strongly affective, and hence, phenomenally marked, *objectual mode of presentation*. But while *necessary* for rational human mindedness, Hegel thinks of this type of immediate common-mindedness is ultimately limited and one-sided.[[25]](#endnote-25) Spirit is indeed found *immediately* embodied in communities of like-minded individuals, but such individuals are themselves *ultimately individuated* by the particularity of their individual embodiment. The opposition between master and slave in the *Phenomenology had* dramatized *just this* potentially antagonistic dimension of *spirit*. But again, it is not the *simple fact* of any particular subject’s physical spatio-temporal individuation that is sufficient for the development of the singular dimension of that subject’s identity. This individuation must be reflected *within the conceptual* structures of spirit allowing such self-consciousness, and this requires a distinct sphere of recognition for this to happen. In the *Philosophy of Right*, such an individualized moment of spirit is reflected in the sphere of objective spirit that is the inverse of that of the family. This is “civil society” (§§182–256), the more impersonal *public* sphere grounded ultimately in *economic relations* between individuals, and in which each member participates *as* an individual “I” rather than as part of a collective “we”. Within this sphere, each subject is effectively recognized as a point-like bearer of abstract rights. It is in *this* sphere, that subjective mental contents are typically thought of in “de dicto” ways.

This *further* type of combination of internal and external relations to others found in Hegel is again reflected in Stalnaker’s model for mental contents, and is what differentiates his analysis from that of David Lewis. In representing the total belief state of a subject, Stalnaker draws upon a variant of possible-worlds semantics introduced by Lewis, who had treated the content of “centered” or subject-locating judgments as sets of “centered possible worlds” (Stalnaker 2008, 49; Lewis 1979). A possible world may be thought of as a set of propositions,[[26]](#endnote-26) and a *centered* possible world will be one containing at least some singular propositions “centered” on a particular subject at a time. While the content of an ordinary, uncentered judgment such as “grass is green” is given by the set of worlds in which that judgment is true, the content of a *centered* judgment, such as “I am sad”, is given by the set of possible worlds which has *a sad person* at its designated center. A set of centered possible worlds thus give a worldly representation to a subject—not as something *in the world*, but rather as the *center of* that world. But it is a crucial aspect of this Lewisian analysis that a subject so represented is represented *as general*—it is this feature that allows such contents to be shared. The content of the utterance “I am sad” will be the same if uttered by both you and me, as long as it is the case for each of us are actually *sad*.

Stalnaker uses the idea of a centered possible worlds to represent the total belief state of a subject, and this will be the basic device to enable a representation of how a subject has beliefs about *the beliefs* of *other subjects*. In fact centered possible worlds function twice over here, in that a subject’s total belief state is to be represented by the combination of a centered world *and* set of centered worlds. The former, the “base world”, represents the contents of the subject’s actual beliefs, while the *latter*, the “belief worlds” represents worlds that are compatible with, but not included in, the base world. If I believe that this rose is red, then my base world is centered on a subject (here instantiated by me) *for whom* it is true that a rose that they are perceiving is red. My *belief* worlds, however, will encompass a broader set of worlds. In some, this rose may be a plastic rather than a real rose, in another, it may be white rose but illuminated by a red light. Such worlds are the worlds of possible subjects *other* than me—subjects who may entertain different beliefs about the rose.

We have said that the subjective point of view given representation with the device of “centered possible worlds” is generic. The meaning expressed by “I am sad” is to be specified in such a way to be indifferent to whether it is specifically *me*, Paul Redding, who is sad: it will express the same content for *any* sad person who enunciates it. But if I tell *you* that “I am sad”, *you* can acquire the properly propositional belief, “Paul is sad”, containing an *uncentered* proposition that can be used to inform others *in other contexts*. It is at this point that Stalnaker modifies Lewis’s account. Just as is the case for names for days of the week, names for *individuals* allows us to break out of the internal system that works in this case in terms of internally related personal pronouns—“I”, “you”, “we”, “him”, “her” and so on. We can talk about other subjects from an “external” point of view, talk of them *as* other entities *in* our world, and not simply as other centers *of* the world within our world, and we can attribute to them *propositionally contentful beliefs* on the basis of what they say, how they act, and so on. But we cannot simply extend this type of analysis to our characterization of *belief states* per se. The thesis of the “essentially indexical” preventing this is just another form of Findlay’s claim of the dependence of general “unfulfilled” belief states on the possibility of fulfilment.

Summing up, Stalnaker expresses the situation in this way: “We cannot give an adequate representation of a state of belief without connecting the world as the subject takes it to be with the subject who takes it to be that way. … When we represent the way the individual locates himself in the world as he takes it to be, we need to include information about who it is who is locating himself there, and we need to link the world, as the speaker takes it to be, with the world in which the speaker takes it to be that way” (Stalnaker 2003, Lecture 3).[[27]](#endnote-27) Here Stalnaker comes close to articulating the structure and dynamics of recognition as conceived by Hegel. Stalnaker is commenting on the demands of “we” theorists who are trying to make explicit the mental contents of some intentional subject. We must represent that subject as in the world (our base world) but in such a way that nevertheless involves recognizing her *as* a subject who *also* has a world that in turn will contain other subjects with their worlds. As in Chapter 4 of the *Phenomenology*, the recognition of other subjects *as subjects* cannot be elided from in conceptualising the requirements for any form of cognition. But what Hegel brings home in the *Phenomenology* is that this requires a certain sort of reflective insight on the part of “we” theorists. We have to grasp that *we too* belong to the system we are seemingly viewing from “without”. When we attempt to abstract from the broader context of the overarching “we” of the historical human community to which we *theorists* belong, the quest for objectivity goes too far. But integrated *within* a fundmentally intensionalist logic grounded in the collective beliefs and experience of a “we”, this same quest might perhaps provide the semantic resources for the type of philosophy of mind Hegel had intended to construct on the basis of his logic.[[28]](#endnote-28)

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1. ## Notes

 For example, much of the empirical subject matter for this study seems to have been taken from material presented from a Wolffian perspective in an undergraduate course Hegel had taken as a student in Tübingen. See Jeffrey Reid (2013). [↑](#endnote-ref-1)
2. While the latter derives medieval approaches to Aristotle’s philosophy of mind, and was revived by Brentano in the nineteenth century, the former was the English translation used by Sir William Hamilton for what the Port Royal logicians had called the “*compréhension*” of a term, and which they opposed to its “*étendu*”, translated by Hamilton as its “extension” (Kneale 1968, 84). Arthur Prior treats the *intentional* as a species of the *intensional* (Prior 1968). [↑](#endnote-ref-2)
3. For the general Kantian orientation of Hintikka’s thought across a variety of areas see Sintonen 1995. [↑](#endnote-ref-3)
4. Although this is not made explicit, this part of Hegel’s story seems strongly to suggest a central role for *language* among the conditions for this primitive form of social existence, and so, among the conditions of *self*-consciousness, and thereby, of *consciousness*. [↑](#endnote-ref-4)
5. For an overview of Hegel’s complex ideas on the relation of thought to language see my 2016a. [↑](#endnote-ref-5)
6. It is certainly true that Hegel is critical of those “internalist” quasi-Cartesian ways of thinking of the mind that dominate the *Consciousness* chapters of the *Phenomenology*, but we should not think of them as simply *disappearing* with the shift to the more “externalist” perspective of chapter 4. In Hegel’s peculiar language they are “aufgehoben”—negated yet preserved—at the higher level. Contents of consciousness, I will suggest, are simply *further* *contextualized* within an account of the inter-subjective conditions of *self-*consciousness, such that objects *qua* objects of consciousness mediate relations between the different self-conscious subjects. [↑](#endnote-ref-6)
7. While agreeing with much in the later Wittgenstein concerning the *parasitism* of “our talk about the so-called inner life … upon talk of our so-called outer life” (Findlay 1963, 204), Findlay always opposed the*“*radical publicism” (227) of the later Wittgenstein’s account of mental content. [↑](#endnote-ref-7)
8. Cf Findlay: “To be aware of objects *as* objects of consciousness … may be held to lead … to the thought of the possible presence of such objects to other possible conscious intentions … and hence to the thought of other possible consciousnesses themselves” Findlay 1961, 70. [↑](#endnote-ref-8)
9. Developmental psychologists portrary this capacity as marking a distinct developmental stage called the child’s “theory of mind”. [↑](#endnote-ref-9)
10. Hegel’s use of “*Satz*” is often translated as “proposition”, and while the German term can be translated in either way, at least here it seems clear that Hegel means the linguistic item. [↑](#endnote-ref-10)
11. I explore this in greater detail in Redding 2016a, chapter 3. As mentioned, Leibniz had employed such intertranslation between singular and particular judgment forms for logical purposes, and treating singular judgments as universal judgments had been a standard practice among Medieval logicians. [↑](#endnote-ref-11)
12. Here I am using the idea of *de re* states as about *specific* objects, not just individual objects per se. C.f., David Lewis: “If I hear the patter of little feet around the house, I expect Bruce. What I expect is a cat, a particular cat. If I heard such a patter in another house, I might expect a cat but no particular cat” (Lewis 1979, 513). I am treating *only* the former expectation as a properly *de re* attitude. The two states have very different fulfillment or satisfaction conditions, the former cannot be satisfied *without Bruce*. [↑](#endnote-ref-12)
13. Hegel switches between the examples “the rose is red” and “the rose is fragrant”. For simplicity sake, I will keep to the former. No logical point hangs on the difference between examples. [↑](#endnote-ref-13)
14. C.f., “‘The rose is fragrant.’ This fragrance is not some indeterminate fragrance or other, but the fragrance of the rose. The predicate is therefore *a singular*” (Hegel 2010, 560). [↑](#endnote-ref-14)
15. “From the side of this universal sphere, the judgment is still positive” (Hegel 2010, 565). [↑](#endnote-ref-15)
16. Moreover, what counts as a determinable of any entity depends up what *sort* of entity it is. While numbers can be characterized as either odd or even, but *not* as either red, or blue, or yellow, or …, roses can be characterised as either red, or blue, or yellow, or …, but not as either odd or even. Aristotle’s hylomorphism is implicit here. [↑](#endnote-ref-16)
17. Formally, the accessibility relation holds between two worlds w1 and w2 iff the proposition, whose content is given by w2, is *possible*, given the truth of the propositional contents of w1. [↑](#endnote-ref-17)
18. For a helpful survey of the philosophical issues involved in tense logic, see Meyer 2015. On the history of tense logic in the development of possible-world semantics, see Copeland 2002. [↑](#endnote-ref-18)
19. Prior refered to Findlay as the “founding father of modern tense-logic” (Prior 1968a, 1). [↑](#endnote-ref-19)
20. In the Subjective Logic Hegel effectively classifies this judgment as an instance of the “positive judgment” of determinate being, which marks the most minimal functioning of a *Satz* as a judgment. His example there is “now is day [*jetzt ists Tag*]” (Hegel 2010, 562). [↑](#endnote-ref-20)
21. Or put otherwise, the classical language is conceived as the metalanguage within which the modal language is interpreted. [↑](#endnote-ref-21)
22. In his defence David Lewis had drawn on the parallel to tense, likening scepticism about other possible worlds to scepticism about other possible times. Prior, however, had already expressed skepticism about the reality of points of time, which he considered to be mere abstracta. In relation to possible worlds he considered this interpretation to be merely a “tall story” (Prior and Fine 1977, 92). [↑](#endnote-ref-22)
23. The idea of a plurality of worlds here captures something intuitive about belief. If, catching a glimpse of it through the bushes, I form the belief that my neighbour’s new can is *red*, this belief is compatible with a variety of other ways the can may be—two door or four door, manual or automatic, and so on. Part of what it means *to believe* something about the car is to know there is more to find out, finding out involving the elimination of particular possibilities. [↑](#endnote-ref-23)
24. Kit Fine has explored this parallel between tense and first-person judgments in Fine 2005. [↑](#endnote-ref-24)
25. This immediacy is also seen as typifying the social relations of pre-modern communities more generally. This is “Sittlichkeit” in its immediate form. [↑](#endnote-ref-25)
26. Lewis treats the “centered possible world” approach as independent from his own ontology of possible worlds. Lewis 1979, 533. [↑](#endnote-ref-26)
27. “We cannot give an adequate representation of a state of belief” he notes, without connecting the world as the subject takes it to be with the subject who takes it to be that way. What we want to represent is the state of belief that a particular individual x has at a particular time t in a particular possible world. When we represent the way the individual locates himself in the world as he takes it to be, we need to include information about who it is who is locating himself there, and we need to link the world, as the speaker takes it to be, with the world in which the speaker takes it to be that way” (from Lecture 3, Locke Lectures) [↑](#endnote-ref-27)
28. The restrictions of David Lewis’s centred-possible-world analysis of belief might be likened to the restrictions that Hegel deals with in terms of judgment structures limited to the categories of “universality” and “particularity”, but that don’t include a place for what he calls “singularity” (*Einzelheit*). In this system any subject is only determined as a particular instance of a universal, as when a person only conceives of themselves as having no dimension outside their determination as a member of their family. But for both Hegel and Stalnaker, the analysis of the inter-subjective relation must bore down to a deeper level—one in which our ultimate distinctness as believers is acknowledged. For Hegel this beings in the requirements of the category of *singularity*, “*Einzelheit*”. On the relation of these three categories see Hegel 2010, 529–49. [↑](#endnote-ref-28)