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The Grammar of Experience

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Abstract

What do we learn when we focus analysis – not so much on the *content* of experience – as on its universal features and functioning? Descartes believed that such focus (when exercised by someone employing his first-personal method of inquiry) held the key to the fundamental metaphysics of our universe – that it could reveal fundamental truths about the nature of substance, or at any rate could reveal some fundamental metaphysical categories and their contrasts. He believed such focus could lead to a certain doctrine of dualism. Philosophers now widely hold that Descartes' method was profoundly wrongheaded, in no way a candidate method for illuminating the material universe that is our own. In fact, however, Descartes' method is considerably more serviceable. While unable to do what Descartes thought it could do, nonetheless it is ideal for examining a taxon that this essay will refer to as *grammar* or *structure* in the most general sense. Grammar is a *contrary* of *content* or *materiality*, though not the only one since materiality enjoys multiple contraries. Thus Descartes' method can lead us to a certain dualism, but not the one that Descartes imagined.

> '[H]ow to combine the perspective of a particular person inside the world with an objective view of that same world, the person and his viewpoint included. It is a problem that faces every creature with the impulse and the capacity to transcend its particular point of view and to conceive of the world as a whole.'
>
> Thomas Nagel, *The View from Nowhere* (1989)

Introduction

Descartes performed a neat trick. In spite of successfully doubting everything delivered to him by the senses, and in that way dismissing the *content* of experience as epistemically unreliable, he was still able to extract a truth – a fundamental truth – by reflecting on that self-

[1] I would like to thank Barry Smith for introducing me to classical phenomenology, while at the same time rubbing my nose in Descartes. I should never have appreciated Sartre otherwise.

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same experience that he put into doubt. But how is this possible, if the content of experience is all we have from a first-personal perspective? Obviously, then, it is not. And Descartes was the first person to take notice of this important fact. The 'surplus' was referred to by Descartes himself as *apprehension*, and now we would refer to it as *Reason*, with its activities noted as intermixed with the inputs to experience. The label of *rationalism* is now bestowed upon Descartes' philosophy and those that resemble it. But in fact Reason is not all that Descartes utilized, whatever he himself might have come to believe. He had to focus Reason upon the *totality* of the evidence of experience: its *reality and its structure* as well as its content. The structure of experience is what this essay is about.

Now it might indeed seem as though all we ever have, from a first-personal perspective, is the *content* of experience – the sort of thing that one would put into words by saying that it seems I am sitting here in front of the fire, warming my feet on its flames.[2] In fact, however – and as Descartes perceptively notes – experience comes structured: there is to be sure the content (materials that might gesture at feet, a fire, the warming of the first by the second in a certain experiential arc), but the whole thing is framed in terms of *my* having that content presented to *me*. In other words, experience has a narrative quality to it, where 'the world' (or anyway something *external to experience*) is narrator, and 'I' am the narrated-to.

Hence there is content, whatsoever that might happen to be, and then there is something else. Something less explicit. Something *penumbral* to the content of experience, but not part of that content. There are structuring elements in (or around) experience. For example, the notion that experience bears the quality *as of being narrated-to* – a film-like quality, as one might now say. Or that the objects of experience are always presented as-if located in a spatial continuum (they are *concrete particulars*).

From his observations of these structures, Descartes teases out a string of propositions about the world outside of – or better still to say *independent of* – his experience: the world of *substance*. He devises doctrines pertaining to the nature of body and mind on the basis of looking at and reasoning about the structuring of experience – doctrines that have nothing whatever to do with the content of

[2] It's worthwhile noting here that the process of 'putting things into words' introduces a vast quantity of materials additional to the raw contents of experience – not least the concepts required to do the putting of things into words. So it is wise to exercise extraordinary caution as we proceed. This will be a recurring theme in the present essay.

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experience (the elements that gesture specifically at 'I am sitting here in front of a fire', etc). How is this possible? How comes the structuring of experience to be freighted with implications of such a very wide scope?

I want to examine here the things in Descartes' cross-hairs, the things that galvanized his imagination, and from which he believed he could draw philosophical morals of a very wide scope indeed, even if the contents of each and every single one of his experiences were in their entirety a fantastical tissue of lies.[3]

Of course few thinkers nowadays agree with Descartes' doctrines, and fewer still with his method. But it is worthwhile thinking about the body of evidence that Descartes began to curate, and which now forms the kernel of a large body of data collected by phenomenologist philosophers and psychologists, comprising a vast set added to daily by a totality of researchers operating with a wide spectrum of expertise. Apart from satisfying curiosities (morbid and otherwise), about the lives of entities that enjoy experience, what realities can these data testify to? More precisely, what *segment* of reality do they shed light upon? Are there other routes of illumination of these realities? Are the lessons to be learned on these topics philosophically anodyne? Neglect of these questions, in spite of Descartes' pointed focus on them as fundamental, has obscured Descartes' insights.

My contention here shall be that Descartes discovered something that deserves calling the *grammar* or *logic* of experience, a contrary of the *matter* or *substance* or *topic* of experience. What does the grammar of experience bear witness to? Grammar testifies, least of all, about the 'content' of experience, since content is meant precisely to be perfectly wide open. In that way, grammar and content are contraries. Grammar sheds slightly more light, though still not very much, about the occupier of the subject position (the subject whose experience it is) – without providing incontrovertible evidence of the existence of such a subject; nonetheless the grammar of experience directs some attention to the fact that, were there to be such a subject, then this entity must enjoy certain capacities. However the preponderance of the information furnished by the grammar of

[3] 'Lies' is indeed the right word, as in Descartes' conception experience is a form of testimony; the senses are personified. In the Second Meditation Descartes speaks as though the mind and the sense are in conversation about the properties of a certain piece of wax, each making different contributions to the picture: 'Evidently it was not any of the features that the senses told me of.'

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experience is about *its own taxon* – namely grammar itself. What does the grammar of experience tell about grammar more broadly? This is the ultimate topic of our investigation.

1. Descartes' 'I'

Descartes begins with the 'I' of experience. A first-personal voice animates the entire proceedings in the *Meditations,* all quite explicitly in the service of knowledge. For Descartes, the main function of the 'I' is to generate knowledge of what lies *beyond* experience. Accordingly Descartes employs epistemic categories, for example the twin concepts of error and certainty, to advance his project beyond the bounds of epistemology into the province of ontology, and continues to apply his method well beyond metaphysics too – into the territory of the moral, for example. In advancing this program, Descartes commits a philosophical error quite early on. To see this, we must retrace Descartes' steps.

Consider an unremarkable experience of ordinary domestic life, the sort of thing that one would indeed put into words by saying that it seems I am sitting here in front of the fire, warming my feet on its flames. That which one would ordinarily *say* about such an experience is the *content* of the experience. The content, it turns out, is really quite immaterial to philosophical investigation of philosophical method – immaterial in the colloquial sense. Because, according to Descartes, from any content *whatsoever* you can draw the conclusion 'I exist.'

His argument for that conclusion demands some analysis. In effect, it demands analysis of experience itself, and Descartes puts us through the paces of that analysis. Why can one draw such conclusions? In Descartes' framework, it is because a lived scenario – a scenario presented to you as your own experience – must contain you in it. Whether or not the details of the scenario 'narrative' are true. Reason tells you this. So it doesn't matter what errors might occur in your grasp of the true realities of your situation, the realities gestured at by the content (true or false), or how those errors might come about. *Any* scenario you experience as your life must contain you in it. You can thus reason 'I think; therefore I exist.' This is the *cogito*.

At first blush the reasoning seems positively flawless and decisive. But there is false note in it.[4] To arrive at the conclusion 'I exist',

[4] Leaving aside, of course, the referent of 'I' – a point on which Descartes has been taken to task, not least prominently by Frederick

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Descartes seems to believe he required an intermediate step from simply the experience itself, or even the statement of it (mentioning fires, feet, flames, all manner of stuffs in the world 'out there') to the conclusion that mentions only 'I'. The step involves an assertion of 'I think.' There is a movement from the passive voice, as if things are occurring *around the place* (fire warming feet, etc) and I am a passive and objective observer of the way things are proceeding, no thanks to me, to an *active* voice ('I think') as if I am responsible for some aspect of the proceedings. It is the latter that, at least in the narrative of the *Second Meditation*, issues in the conclusion 'I exist.' Two questions immediately arise: (1) why does Descartes feel a need to assert 'I think'? and (2) is it really necessary?

Like Descartes, I believe he needs 'I think' to infer 'I exist', and for the same reason: without it, there is only the *content* of experience, not a subject of it. Descartes correctly notices that there are no 'I's in the content of experience, and hence that experience requires massaging into an active voice in order to issue in the existence of a subject. At which point, should one reach it, one might proceed with ontological inquiries about subjects construed as *thinking things*. One cannot move to that point without an active thinker.

But then the more serious question arises: is Descartes entitled to assert 'I think'? The answer, I believe, is No.[5] And this is due at least partly to what 'I' refers to. If nothing else, 'I' refers to a

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Nietzsche: 'What gives me the right to speak of an "I", and even of an "I" as cause, and finally of an "I" as cause of thought?' (*Beyond Good and Evil,* part 1, par. 16.)

[5] Hume, one might recall, said as much (Hume, D. 1978. *Treatise of Human Nature*, (Oxford: Clarendon Press) (original work 1739)). Russell too was critical of the inference (RussellB. 1945. *A History of Western Philosophy* (New York: Simon and Schuster), 56). And William James struggled mightily with the question and with what 'I' refers to in both Descartes' and Hume's narratives (JamesWilliam. 1890/1950. *The Principles of Psychology*, *Volume One,* (New York: Henry Holt & Co. Reprinted, New York: Dover Publications)). In Descartes' own time, Georg Lichtenberg took issue with Descartes' 'I think':

> We know only the existence of our sensations, representations and thoughts. One should say, *it thinks*, just as one says, *it lightens*. It is already too much to say *cogito*, as soon as one translates it as *I think*. (tr. in Zoeller, 'Lichtenberg and Kant on the Subject of Thinking', *Journal of the History of Philosophy* 1992, **30**, 418; for the original in German see Lichtenberg 1967–72, *Schriften und Briefe*, ed. Wolfgang Promies (Munich: Carl Hanser Verlag), Vol. 2, 412.)

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thinker, a thinker who is also the subject of the experience narrated in the story. Given that this is what 'I' refers to, it's obvious that one cannot assert the existence of that entity as the agent of an act of thought, or even as a patient (inactive) observer of activity or events. For one simple reason: no such entity appears in the narrative content of experience itself. Recall that Descartes himself specifies that the content of experience can be anything, and that therefrom we should (still) be able to infer 'I think'. So it must be derivable from experience without such an agent as part of its explicit content. But if the content can be anything whatever, how is it possible to infer from it that 'I think'? One has to go beyond the content of experience to find the referent of that proposition – which Descartes does when he asserts 'I think'. No wonder then that he can subsequently conclude 'I exist': its substance is smuggled in with 'I think'.

One might challenge this idea that no 'I' appears in the content of an experience, which appears to be a substantive philosophical doctrine. After all, the narrative itself often utilizes the word 'I' (Indeed one can put it, as Descartes actually does, like this: 'I am sitting here by the fire' etc.) But remember, 'I' cannot refer merely to a body – it is not equally good to report 'A body is sitting here by the fire.' This is not to say that there are no occasions when the content of experience is action or some feature of agency. The uses of 'I' in such contexts are displays of agenticality. But again, where in such experience is one to find an agentic *entity?* And in any case, the sense of authorship does not permeate *all* of experience, not so far as to support the idea that the content of an experience, no matter what it is, supports 'I think'. The uses of 'I' in narrations of the content of experience are deceptive; once the content of experience is put into words, the words can work an independent magic of their own upon our analysis. Magic powerful enough to misdirect even the magisterial Descartes.

But Descartes wasn't wrong to focus on experience. And there is indeed a proposition in existential form to which his inquiries do most emphatically entitle him, one which contains no illicit agent. This is the apparently unprepossessing proposition: 'subjectivity exists'. But here too appearances can be deceiving, because this 'subjectivity exists' is a monumental existential proposition. Indeed quite a bit grander than the one Descartes professed to deduce: 'subjectivity' is considerably more general than 'I'! And focusing upon this proposition will provide the corrective to the errors we encounter in the *Meditations*. It will keep us from making the unwarranted metaphysical leaps for which Descartes was so famous. It is

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compatible with all naturalistic conceptions of the place of the human being in the world. And in fact it can lead to greater philosophical rewards than Descartes thought he was entitled to. What Descartes should have said is that experience comes structured so as to reveal a relationship between an experience and the 'window' upon it – the *subject position* within experience. This is no modest proposition. This is a proposition for which Jean-Paul Sartre deserves much credit – though in my own experience he receives little or none. Sartre noticed – and corrected – Descartes' error. Then he fell victim to an analogous one, as I intend to show.

2. Sartrean lessons

> 'We are tied down to a language which makes up in obscurity what it lacks in style.'
>
> Tom Stoppard, *Rosencrantz and Guildenstern are Dead*

In his inimitable way Sartre shows rather than tells us about Descartes' error. Sartre is nowadays undeservedly neglected by Anglo-American philosophy, perhaps due to his literary orientation and style. This is unfortunate because Sartre also wrote strictly academic treatises that are still fresh and bear on so much that is now mainstream in Anglo-American philosophy. On the topic of metaphysics, Sartre would ultimately proclaim explicitly that no qualities of any kind can be attributed to the subject of experience, for reasons that derive directly from his assessment of where Descartes went wrong. In this way he also draws attention to what Descartes *should* have said – the proposition that I articulated in the last section: he should have said that analysis of experience points directly to the existence and structure of subject-*hood* rather than to subject *entities*. And that furthermore the analysis of experience reveals a *grammar* or *logic* of it, rather than a metaphysics. This is Sartre's own surpassingly important contribution. He did not put it in these terms, however. (That shall be for me to do here.) But once so put, the principle that flow from the analysis can be elemental to a naturalistic approach to subjecthood and the self. Unfortunately, Sartre made his own metaphysical missteps, analogous to those of Descartes: he linked the proposition that nothing can be attributed to the subject much too closely to his metaphysical doctrine of freedom. That was Sartre's error.

The key to the entirety of Sartre's own system of thought is a core axiom of freedom deeply embedded in the distinction between the

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thing-in-itself and the *thing-for-itself*. The *in-itself* is a thing with a fixed essence, while by contrast the *for-itself* is not. In the place of a fixed essence, the *for-itself* enjoys only a history (a *facticity*, as Sartre likes to say), and a completely open future. While for the *in-itself*, its essence mediates between its past and its future. This is the fundamental distinction in Sartrean philosophy, to which everything else clings. Sartre embarks on the philosophical journey with the idea of for-itself fully formed, as an attribute of being human – a basic tenet of his system. This is why he is sorely tempted to make the error to which he ultimately falls prey – an unwarranted metaphysical reading of his results, much like that of Descartes.

I will argue that the distinction between in-itself and for-itself is not what it seems to be on the surface – that it should not be read as its surface grammar suggests. For this distinction suggests a metaphysical reading ('*the* thing-in-itself', '*the* thing-for-itself'). But it needn't, and more importantly it shouldn't in the context of Sartre's project or the first-personal method Descartes pioneered. Instead, the distinction is logical through and through: one and the same entity can be in-itself and for-itself. These are best understood as *properties* or *features* of things, contingent through and through, and positively temporary features; they are most emphatically not *stable categories* of things. Sartre's own examples reveal this to be the case, that whether something deserves the status of Object or Subject depends very much on the point of view or perspective taken in a given experience. Still, in the end, Sartre himself treated his distinction as though it were a metaphysical one. He clearly appreciated Descartes' mistake, but he could not keep himself from making an analogous one.

I shall here indeed insist upon a distinction between Subject and Object. And while it might sound like an ontological distinction – a marker of a difference between nonoverlapping categories of entities in the world – it is instead a logical distinction. For, as our analysis of the so-called *Other* will show, the Subject is a merely *temporary* locus of center – where by 'center' I shall mean the Cartesian origin of spatial coordinates. The Object by definition is not a center, since there can be only one locus of center at a time. The Subject by definition has a window – the only possible one – on the entire space. It is the only possible one because there can only be one. That there can only be one subject, is the *logic* of experience.

Characterizing it positively, the Object is a *resident* or *occupant* of the space of experience. The Subject, by contrast, is *not* an occupant of that space, not an occupant in the way of *taking up* space. This is our first clue that what we are defining now is not a metaphysic but

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a logic. And the fact that this is a logic is precisely what existential argumentation of the sort pioneered by Sartre establishes. Existential methodology opens up a philosophical vision distinct from empiricism but not incompatible with it. The best way of approach to this idea is via the sort of entry that Sartre himself gives us in The Look.[6] I will present it in my own way (in the next section), prefaced (in what remains of this section) by a brief and unconventional primer on the difference between phenomenological and purely analytical approaches in academic philosophy.

Existential thought is a branch of phenomenology. Phenomenology, in turn, is the study of the features of experience, including the objects that inhabit experience – the objects that *show up* in it, in the phraseology of some phenomenologists – and the ways they interact.

It is perhaps commonplace that images are representations of things – real, imagined, or even abstract – and that furthermore images represent things as being one way rather than another, and furthermore that a representation is subject to evaluation as to truth and falsity. In philosophy we are interested in describing the way that people represent the world as being, and especially in how they furnish these representations *to themselves*. But there are different approaches to fulfillment of this theoretical interest, depending on which features of representation the theorist seeks most to stress.

Suppose I take a snapshot of an apple on my desk with a digital camera, as a means of producing or preserving for posterity an image of it. I can then work with this digital image in a pixel-by-pixel fashion, using specially designed software. A software application so suited treats the image as a filled array (in the apple snapshot's instance, two-dimensional) of information. The information is all of the same kind, the elemental values of my mode of representation – values of color or light, say. Manipulating that array is a matter of changing the relevant values in the array in various ways. Contrast this way of working on an image with a different one: the way employed by drawing or design software – for instance in Microsoft Word or Powerpoint. Such software allows you to insert 'objects' into your image – items that it recognizes as belonging to different categories. To create a stand-alone image, the software allows you to combine objects of different (software-defined) categories in spatially overlapping ways. Sometimes the drawing software sanctions some combination of first-order (software-defined) objects into

[6] Part III: chapter 1.IV of his masterwork *Being and Nothingness*, Sartre 2003[1943]. *Being and Nothingness: An Essay in Phenomenological Ontology*. Tr. Hazel Barnes. (London: Routledge).

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higher-order 'combination objects', while banning or disallowing others. I will refer to this broad method of handling an image as *object-oriented*.

The pixel-by-pixel image has a fixed *resolution*. It represents the apple on my desk by containing information that *corresponds structurally* to features that can also be discerned by the human eye. By contrast, the object-oriented image has a *logic*. It represents the apple on my desk explicitly (rather than implicitly, as it might in the pixel-by-pixel image) as having parts that fit together to make a certain whole. These relations of parts to whole are not *directly* represented by the pixel-by-pixel representation, though the structures that 'emerge' from the pixel-by-pixel representation might 'contain' that information (assuming for the moment that we can invoke a suitable language for discussing information containment). In addition, the object-oriented representation is *scale-free*: one can reproduce it at any scale one likes and at any convenient resolution, without loss of information. By contrast, the pixel-by-pixel image's scale (like its resolution) is fixed. The pixel-by-pixel image is as logic-free as anything can be; it is also category-free, open to any construal of the information. Where contrariwise the object-oriented image is as resolution-free as an image can be, but (at least potentially) restricted in its object categories to a fixed (software-defined) set.[7]

Analytical philosophical methods are analogous to the pixel-by-pixel method of handling an image – hugely information intensive treatments of the world that do not rely on or commit to a stock of pre-configured object categories. Ontology can be left entirely implicit, if the analyst so wishes. By contrast, a phenomenological approach (of which the existential approach is one branch) is analogous to the object-oriented method: it is concerned with the way that experience appears to the subject as *already-structured* and strives to re-describe a subject's experience in these terms, in the logic of part-to-whole. (Of course the phenomenologist has first to identify the menu of objects that subjects have available to them in the representation of experience, but that's just part of the phenomenologist's job description.)

A human being's native corpus of images and other means of memorializing the objects of experience is a rich body of material presented to cognition. A great deal of that material comes in through the front door of perception – indeed much of what is explicit in

[7] It would seem that there is a tradeoff between resolution and scale-freedom, and that the question of object orientation has a great deal to do with both. But I shall not pursue that subject here any further.

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experience is narrated in experience itself as having come in through that front door. But many of the materials for constructing a representation must come in through the windows and the cracks in the walls. I venture that a vast proportion of what makes the entire domicile of experience habitable – the 'building's utilities', as proves fitting to our present metaphor – has to have been original with the very structure, ready to be deployed at birth. (I am of course gesturing here at the possibility of native cognitive structures, such as some basic concepts; but here is not the place for discussing the specifics of such a hypothesis.)

3. Making moves

I begin this section with an adaptation of Sartre's Look.

I am enjoying the view from my favorite park bench, when I notice the figure of a man in the distance. I am at liberty to speculate wildly about that man's relationship to other objects I locate in the space whose very centre (whose 'origin' as the geometer says) I occupy – for now, anyway. For instance, I might speculate as to how the man in the distance manages to avoid being blown to one side by gusts of wind, as nearby objects of similar apparent size and heft are now being blown. Wild speculation is admissible on this point *only* if I've never interacted face to face with objects of his kind. In that (strictly hypothetical) condition I might experience the whole world – indeed, space itself – as emanating from my point of view (my Self) as its center, a Cartesian point without extension. I am a Subject – an entity with a perspective – upon a universe of Objects themselves without 'windows' – available for viewing from the outside, but nothing on the inside looking out.

But let me be looked upon just once – for example by that man as he approaches my park bench. As he catches my gaze I am locked into an experience of vertigo. I am displaced from the centre of the universe, even as I experience that very centre flee from me and towards him (*not* me!!) as Subject. And suddenly I become no longer Subject, but now one of many Objects – Others – in that universe I once transcended (in the posture of a potentate) absolutely. An Other in my world – an Other with a capital O – was once upon a time an object distinct from myself, bearing a spatial location to me, and bounded in space and time. Before I encountered this man, before this (my first) close encounter, I knew Others only as objects or bodies, bounded in time and space, within my universe, I its sole Subject. For, to be an Object is, as Sartre puts it, to be *for-another* rather

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than to be *for-oneself*. When I encounter that man's gaze, I encounter myself, for the first time, as an Other, an object in another subject's universe. I become phenomenally present to myself as an Object. I feel exposed for the first time, an entity with an exterior, embedded in a universe that is open to being viewed by Others. In the transition – the displacement – from the former status to the latter, I am *objectified*.

I, which was once upon a time a for-itself, have become an in-itself. I which was once upon a time a Subject, have become an Object. Clearly the line dividing these things can shift, depending on the 'grammar' of the experience, as it were. For experience comes with a 'logical form', and this is the deep meaning of Sartre's analysis. *The distinction between Subject and Object is a logical one,* as is the distinction between in-itself and for-itself. I propose then that we use the following terminology, more suited to this logical conception: *for-itself* v. *for-others*. This too is language Sartre uses indiscriminantly within this tight circle of ideas. But I propose that for our purposes we reserve the '*for-itself* v. *for-others*' language to mark the logical distinction at which we have now arrived. Equally, no other reading befits the terms 'Subject' and 'Object'.

Back now to the narrative. When I encounter that man's gaze, I encounter myself, for the first time, as an Object in another Subject's universe. I become phenomenally present to myself as an Object. This experience of *objectification* is absolutely transfiguring in the timeline of human development – a topic that has recently drawn great attention in the discipline of psychology.[8] Appreciating it amounts, at least partly, to appreciating the formal/mathematical distinction between the *topology* of space and the *coordinate axis* one uses to refer to individual 'points' in it: the former refers to features of a spatial manifold that are observer-independent, while the latter is the frame of reference an observer uses to coordinate a scheme by which to refer to portions of the manifold.

For Sartre, objectification came to be viewed as a kind of social or moral *problem*; and this view of objectification, as a human social reality, ultimately caused his philosophical faltering. For Sartre came to believe that objectification is something that Subjects

[8] This was a point that Simone de Beauvoir (*The Second Sex,* Parshley H. M. (translator), (New York: Alfred A. Knopf, 1984 [1949])) especially was at pains to explain *contra* Sartre, a point with which Maurice Merleau-Ponty (*Phenomenology of Perception*, trans. C. Smith (New York: Humanities Press, 1962)) and that more recent feminist phenomenology has championed – see especially Thalos 'Towards a theory of freedom', *Theoria* **134**, 1–25, (2013).

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cannot tolerate. Not phenomenologically, nor in any other way. He thought that objectification was experientially and motivationally noxious. But in reality this is not generally true, as we will now discuss.

4. Subjecthood: the center does not hold

> Some days I put the people in their places at the table,
> bend their legs at the knees,
> if they come with that feature,
> and fix them into the tiny wooden chairs.
>
> But other days, I am the one
> who is lifted up by the ribs,
> then lowered into the dining room of a dollhouse
> to sit with the others at the long table.
>
> Billy Collins, *Some Days*

Face-to-face encounter, suggests Sartre, is fraught with peril on all sides. Because in these encounters 'I' am in an awkward, even impossible, object position. It is an 'exposed' position, and so intolerable. But the critical thing to note, *contra* Sartre, is that the feeling of being displaced from center is transitory in a number of ways; first, in the way that Sartre himself notes – that experience of objectification motivates me to objectify in return and in that way to 'take back' the center, but more importantly in that the experience is itself transmuted (by a kind of alchemy) in a predictable way over the developmental timeline of experience. In this process, it shapes psyches – and bodies too – in a certain natural arc of human development.

Ordinary humans embedded in ordinary social contexts have been experiencing objectification from birth – which in repeated experience ultimately adds up to an overcoming of their self-centered universe. They have repeatedly imbibed many such experiences of displacement, in the first instances within the orbit of benevolent adults. In these experiences, surrounded by caretakers, ordinary human beings learn to overcome the illusion of being the very center of the universe. For the idea that space emanates from me as center is a genuine and potent illusion. Real space (if space is indeed real) is, if you will, *un*-centered; in the language of geometers, it is a manifold without a coordinate axis. The very notion of center itself is thus an illusion that a genuinely social being has eventually to overcome. To ordinary, social humans, once mature, the

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experience of being trapped in another's gaze like a fly in amber is so familiar, so bound up with everyday life, an inalienable dimension of our experience, that we hardly notice it as a displacement at all. This is the natural way of it. We come to see Others – all of them, including ourselves as undistinguished members of the tribe – as all potential centers. Some of us in fact thrive upon the experience (known as being the 'center of attention' and it is as far from 'center of the universe' as a Subject can get). So commonplace is it, that the preponderance of us view the experience as simply the everyday, far-from-staggering fact that there are Others 'looking out from behind' those faces with whom we have made first-personal contact. We are not simply seeing eyes in these interpersonal episodes. For as Sartre is quite right to say, to see the gaze, as such, requires going behind the eyes to seeing the perspective looking out from them. In the first (the naïve) instance, The Look has the power to cause displacement; but in the mature instance, displacement is no longer warranted. Nor is it necessary, as by that time we no longer experience space as permanently centered by 'me'.

Looking upon another face is, for the ordinary adult, simply an everyday occurrence of being presented phenomenally with another perspective that's not one's own. We come to appreciate Others not merely as objects (though they are potential objects too, and that much we can also appreciate); we see them also as potential subjects (or indeed actual subjects).[9] Cognitive development leading up to this everyday experience is, as we have come to appreciate in autism, neither to be taken for granted, nor trivially theorized about. 'Perspective-shifting' eventually becomes a completely ordinary feat that typical (normal) human beings perform with ease – so practiced in it, in fact, that we eventually can no longer experience ourselves as making an effort. But understanding the phenomenology coiled tightly within its mature version still reveals a profound fact: that the capacity to appreciate the phenomenal presence of other Subjects, and thereby to appreciate oneself also as a potential Other, makes one a potential target of more than this ordinary form of objectification. It makes one eligible of a certain type of objectification – an asymmetrical form of the larger genus, one that does not admit of the reversals we have been discussing. I elsewhere (Thalos, in progress a) call this form of non-neutral objectification *cancellation*.

[9] An insightful student (Victoria Rowe, by name) one remarked to me once that she cannot remember every experiencing people as 'things'; as far back as her memory goes, they always show up as distinct from things, affecting her consciousness in distinct ways.

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Sartre could make no peace with cancellation. (Nor can we, in good conscience, expect him to do so, as this form of objectification is indeed noxious.) He spoke of it (Sartre 1948, 1976) in relation to the phenomenology of being Jewish or being black in enormously insightful terms.[10] He was especially mindful of the fact that trying to see yourself through the eyes of those who think of you as less than fully human – which is a nontrivial imaginative exercise for anybody but especially so for a subject who is different in importantly relevant ways from the target object of imagination – has a profoundly corrosive effect on yourself as an agent. It is for these reasons that he came to believe – ironically, indeed perversely – that there is no true objectification, that the ego is permanently able to elude objectification, and that therein lies its freedom. (But how should we even know what objectification is, if it does not actually befall us in experience?) Sartre came to regard the ego as a permanent fugitive, never present even in the moment when reflecting on itself. In such moments it must transcend that which it reflects upon. The ultimate coward.

In my view Sartre did not make a sufficient distinction between neutral objectification and the more objectionable sort. He did not really appreciate that the one and only trouble with *neutral* objectification is that there's simply not *enough* of it in certain contexts and places – those places where there is *domination* of certain groups by others. He did not appreciate that there are two distinct logical forms that objectification can take – a morally neutral (symmetrical) form that features in the tale of the man in the park, and a non-neutral (asymmetrical) form that routinely rears its head in contexts of racism and other forms of self-styled supremacy.

All the observations we have been making about objectification are logical in character. We need to make a few more observations of a logical character before we can diagnose Descartes' error properly. We need to articulate what we mean when we say that something *possesses* or *displays a logic*.

5. What is it to have a logic, anyway?

The fundamental point I want to stress in this essay is that subjecthood has a logic, in the same sense that *gifting* has a logic. In saying

[10] Haddour, Azzedine (2011) 'Being Colonized' in J. Webber (ed.) *Reading Sartre: On Phenomenology and Existentialism* (London: Routledge): 73–89; cf. also Morris, Katherine J. (2011) 'The graceful, the ungraceful and the disgraceful' in J. Webber (ed.) *Reading Sartre: On Phenomenology and Existentialism* (London: Routledge): 130–144.

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this I mean to be asserting that subjecthood has a specific *syntax* or *grammar*. And that means that there are distinctive roles that *must* be filled on any given occasion of subjecthood's realization. (This condition holds of a great many other social transactions and socially salient events – social reality is a network of happenings with overlapping logics, in addition to the material qualities on which they rest. For instance, the logic of gifting overlaps with that of *ownership*).

Syntax is easier to illustrate than to define correctly. For example, the OED defines 'syntax' as the 'orderly or systematic arrangement of parts or elements'. But what exactly constitutes an 'orderly' or 'systematic' arrangement? The fundamental idea behind the notion of 'orderly' and 'systematic' is that syntax is *normative*. There are right ways and wrong ways to arrange elements so as, for instance, to constitute a thought, just as (and in exactly the same way) there are right ways and wrong ways to arrange words – the wrong ways don't result in complete sentences. For instance, I can't couple the thought element for 'apple' together with the one for 'Nancy' and have a complete thought or sentence. When elements are constituted in an 'orderly' – in a correct – way, then the act of intellection on such occasions results in a complete, whole thought. But not otherwise. This fact is no less true of gifting: done the right way, a transfer of property is a gift; done a different way it is a theft or forfeiture or even something completely unrecognizable as a socially relevant performance.

When done properly, the result of combining elements in thought or judgment is something with a distinctive *unity*, corresponding to the standard or norm that governs its application – a unity that renders it a thought or judgment proper. Just as the 'syntax' of a property transfer makes some action one of gifting, so the syntax of a series of mental events enables a judgment to constitute a thought – to have *something complete* to say.

Similarly, the act of objectification has a specific syntax. Its grammar is that it involves the apprehension of something *as an Object,* in the *object-oriented frame of representation* we introduced above. That apprehension is a form of *judgment*. Syntax is what minds add to the world. Without entities that judge, there is no grammar, indeed there is no logic of any kind. Minds do indeed construct: they construct one of the contraries of *materiality*. They create the *grammar* of experience – they create that which is penumbral to content. Minds are the original vehicles of object-oriented representation.

To make sense of the idea of what it is to be an object in an object-oriented frame (such as a judgment), one needs to make a distinction

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between the ordinary object (an apple, say) and the same object (that apple again) as subject of a judgment or representation. The latter is referred to as the *categorial object* in classical phenomenology.[11] The ordinary object can be the subject of perception, but it cannot be the subject of more complex cognition (for instance, judgment) directly. The direct subject of thought is the categorial object – the object-as-suited-to-being-subjected-to-categories-of-thought, such as, for instance, the category *fruit*. The ordinary object cannot be the object of predication. Only the categorial subject can be the object of predication – as only categorial objects are possessed of *syntax*. (Clearly, apples do not have syntax, just shiny skins, at least for the best of them.) And only objects with syntax have a suitable structure – structure that renders them apt for the inhabitation of judgments – only they have the right hardware, the right attachments, to speak metaphorically. Because – to mix the going metaphors – only a piece with the right 'shape' will fit into the jigsaw puzzle with unity that is a judgment.

Now here is my contention: the syntax required for participation in judgment is logical syntax – structure that reveals the logical role that the categorial object plays in the judgment (and by courtesy the associated sentence or proposition). As Robert Sokolowski puts it, 'Syntax in language simply expresses the relations of part and whole that are brought out in categorial consciousness' (2000, 91). It concerns the rectitude of their combinations, in combinatorical terms.

A judgment is a kind of performance – an *act* – in real time. So to illuminate judgment we require also a metaphysic for its full analysis. (This fact explains why the meanings of indexicals and demonstratives is insufficient to fix their referents – an analysis of the metaphysics of the situation is also required.) When such an analysis is provided, it will require illumination of the syntax or logic of judgment, of the specific part-whole relations involved in it.[12]

It sounds as though I'm saying that syntax is mind-dependent, so that of course the existence of minds falls out directly from the existence of something with syntax. This is incorrect. What I'm saying is that syntax involves *proprieties*, and that rules of syntax aren't

[11] Cf. Lohmar, Dieter (2011) 'Categorial intuition' in H.L. Dreyfus and M.A. Vrathall (eds) *A Companion to Phenomenology and Existentialism* (Wiley).

[12] Thalos discusses at some length the logic of judgment, in 'From paradox to judgment: An essay on the metaphysics of expression', *Australasian Journal of Logic* **3**: 76–107 (2005).

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restricted to symbols alone but can apply also to – among other things – actions in the sphere familiarly called the mental. Much as we might say that a jigsaw puzzle also enjoys a syntax. The key concept here is 'propriety'.[13]

Now Descartes' contention, put in the terms being assembled here, is (i) that objectification, no matter what is being objectified, is evidence – indeed, decisive evidence – of an objectifier. And furthermore, (ii) that it tells us that the objectifier and the objectified belong to different categories of entities in the world. Sartre had his own version of (ii). It is my own contention that in fact no version of (ii) is correct. And that (i) is really much stronger than one is entitled to on the grounds Descartes displayed alone: the true deduction should speak of *subjecthood* rather than entities performing objectification.

6. Philosophy in the first person: On Cartesian *Meditations*

Descartes was a remarkable philosophical and scientific intellect. Not only did he manage to foster a certain transformative vision of science that no one had even considered before him, but he demonstrated and exemplified (and indeed even performed) the self-same principles of inquiry underlying that vision, in the very process of doing so. I'm referring of course to the first-personal vision of scientific methodology that Descartes devised almost *ex nihilo* in the *Meditations*,[14] building in radical ways upon the rhetorical methods of the Pyrrhonian and Academic Skeptics. Some of these principles were subsequently adopted much later (wholesale or retail) by phenomenologists such as Edmund Husserl, and existentialists such as Sartre. Indeed, Descartes was both the first phenomenologist and the first existentialist, centuries before these schools of philosophy existed, all the while maintaining in good standing his credentials as a

[13] In 'Truth deserves to be believed' (*Philosophy* **88**(344): 179–96 (2013)) I argue that truth (unqualified) is about proprieties. To fill out this idea, we will be obliged to say that *logical* truth is about proprieties of *thought specifically,* where by contrast material truth concerns the proprieties of correct representation of the 'material' facts of the world. This idea is worked out in Thalos (in progress 'The government of logic and mathematics').

[14] And had there been ideas he should have liked to communicate but did not feel able to do so openly for fear of reprisals or personal repercussions, I think we are entitled to suppose that he might well have shown these without saying them.

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mechanical philosopher and mathematician extraordinaire. And his pioneering achievements in geometry, algebra, analysis, optics and mechanics are by no means independent of his philosophical innovations.

Kant did not fail to appreciate Descartes' philosophical genius, and while he sought to take on board the philosophical innovations that Descartes wrought, still he manifestly failed to do so: Kantian transcendentalism is *constructivist*, and in that important regard diverges from Cartesian rationalism. For Kant, the first-personal perspective seeks to illuminate the structure of experience because (essentially) that structure is *imposed* by the first person upon experience. Whereas for Descartes, the first personal analysis is sought because its fundamental judgments are the most secure of all – *not* imposed but simply made exquisitely manifest in first-personal experience. Not only is it manifest in first-personal experience, but also uniquely transparent there, much the way a window is transparent so as to enable rather than to hinder grasp of the entities at large in the world. It is precisely because the window is transparent that it is requires a philosopher – with an appropriate methodology, to be sure – to identify and focus attention upon it in its own right.[15]

For Descartes, the fundamental judgments or 'moves' made in the first-personal perspective render service as windows upon the world and with good reason; whereas for Kant there are no windows upon the world-as-it-is. And attention to this fact, by Descartes' lights, prevents us falling into errors (for example, errors of thinking that our vantage and grasp of external objects is rendered through faculties of perception). The Cartesian lesson can be embraced *without* falling back on a constructionist account of knowledge. In other words, one can view the truth illuminated by Descartes as truths, without seeing them also as constructed.

As I see it, there is raw truth on both sides of the constructionist question. First, Descartes is correct that the world is indeed illuminated, for roughly the reasons he gestures at: we are exquisitely (because we are children of natural selection, we might say on this side of Darwin) attuned to certain features of the world. But Kant is also right: the very idea that we create windows, which is to say

[15] In a sympathetic spirit, John Carriero ('Epistemology past and present', draft in progress) says that Kant and more recent epistemologists are up to is illuminating 'epistemic practice', whereas Descartes, Leibniz and Spinoza are up to something else – namely, illuminating the ways in which our cognitive equipment is in line with the ordering principles of the world.

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that natural selection brings into being entities (us) who peer through windows at the world, involves a construction. Because we add to the facts of the world when we look upon it. Our judgments, as our detour on logic reveals, bear the inalienable marks of subject-hood – a grammar. *We add grammar to the world* simply by performing acts of judgment upon its various parts. And only insofar as we do so can it be appropriate to hold us (in our judgments) to standards of correctness. Only because judgment aspires to portray or assert – and to do so quite independently of what the subjects of judgment aspire to do with the judgment – that an act of judgment can be said to do so well or badly, truly or falsely.

Descartes' utterly novel innovations in first-personal philosophy focus attention on narrative, the act of narrative, and in particular on personal narrative, as philosophically salient. His analysis illuminates knowledge as narrative, performed in a two-place dance, rather than as a bloodless thing of axioms and deductions. And in so doing it paves the way for the notion that science provides 'understanding' to the thinking person, understanding that can be appreciated from a first-personal stance, and only from such a stance. Science is a first-personal intellectual exercise performed by the thinking person as such upon some portion of the world. It requires no special authorities. And, furthermore, it (science) is the premier (or at least the most noble) imperative of a thinking person.

We come away from the *Meditations* with the counsel that all along we have been gazing *through* the machinery that anchors our grasp on the world.

More than anyone on the planet Descartes envisioned certain objectives of first-personal philosophy: to secure a true metaphysic of the entities that occupy the universe. And that means starting with the fabric of the universe itself: space and time. No one in human intellectual history has contributed more to understanding this fabric than Descartes. (And in spite of all the talk about the 'classical framework' of space being passé, untenable or superceded, there is at the present time no such thing as a successor to it. We do not yet know in anything approaching a general way how to do without at least a semi-classical picture of space; relativistic options do nothing whatever to accommodate the realities that quantum theory reveals, and that's why there is a thriving industry and trade in theories of quantum gravity.)

Descartes did not invent analysis of space, and he certainly did not invent geometrical analysis. But he invented *algebraic analysis of geometrical forms*. In essence he invented the *logic* of geometry. This became the substance of real analysis from that time forward, and

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consequently the analysis of space, and has been ever since. He put together the third-personal (algebraic) formulation with the first-personal (geometrical, perspectival) formulation of it. Nothing has been the same since. Descartes' conception of space and its treatment is by no means tied to the familiar flat 3-space conjoined to the memory of his name. His analytical machinery provides the tools for analysis of all Riemannian spaces, including those that Einstein preferred.

7. Windows and the logic of experience

What Descartes showed decisively and incontrovertibly is that experience bears the mark of a subject. Consequently it has a corresponding grammar: I'll inscribe this grammar here as 'subject-window-object' for lack of a better schematic toolkit.

Experience is always perspectival, as I have been at pains to explain: it comes framed. And the frame is inalienable from the experience itself – without a frame, it is not an experience, but something else entirely, perhaps a simple image. The frames of which I speak stand in relation to the corresponding realities 'in the world' as a subject of experience stands to its object – they signal the relation of subject-hood as unexpungeable from the exercise of perception, just as the subject is also unexpungeable from the exercise of judgment. Experience must bear the stamp of a subject in that it must reflect a certain 'point of view' – quite literally.

Moreover, the overall structure of experience bears the mark of a subject *as the anchor point to which it is beholden*. It presents experience as itself *dependent upon* a subject position. I'll inscribe this asymmetry using the orthographic instrument of italicization as: '*subject*-window-object'.

Descartes took the logic of experience seriously, and in the process was able to observe the fact that experience has a smallest scale, the scale of 'I'. 'I' is the smallest window on experiential content that one can have.[16] (And so, in an important sense the meaning of 'I' is thoroughly logical; and this explains why its reference is not fixed by its meaning.) There's no question that information is entering and being processed at smaller scales than 'I' (at the scale of sense organs, for example), but such information is not processed as

[16] This point of course suggests that there might be 'larger' scales of experience, scales of 'we'. That topic is explored in Thalos 'Solidarity: A Motivational Conception', *Philosophical Papers* **41**(1): 57–95 (2012).

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having the grammar of experience. It was well known in Descartes' time that all manner of devices process information that humans too process – Descartes himself wrote one of the earliest treatises on optics, describing how lenses can systematically process light information. But nowise is this way of processing information, as such, experience: experience is not merely the processing of information. This is an important philosophical truth about experience. It is most unfortunate, however, that this important philosophical truth is often construed as an insight into the metaphysics of the world. (And Descartes made that error himself, seeing as how he thought he could proceed to tell us what the nature of the 'I' whose existence he thought he had proven.) But really the finding is about the grammar of experience – that it comes inalienably beholden to a subject position. Descartes stumbled upon the logic of experience, which unfortunately he mistook for a metaphysic of dualism. There is another, independent path to that logic that we will now explore only briefly.

Consider the clear fact that sometimes experience contains pain – that is, that sometimes one experiences pain. If we take the content of experience as a guide to the existents in the world, we will be led to conclude that there are such entities as pain in the world. But this is just to misunderstand the grammar of painful experience. For it isn't that the experience is revealing something to the subject about a particular target – something that deserves representing as an object. It is quite true that there are receptors in the body – named 'nociceptors' by C. S. Sherrington in 1906 – that are activated in many – but importantly, not *all* – cases of tissue damage, resulting in the experience of acute pain (cf. Cervero 2012). But even granting all this, we must nonetheless recognize that tissue damage is not the *denotation* or *content* of painful experience. Moreover one can feel pain in the absence of tissue damage, indeed of any damage at all (as for example in grief and heartbreak).

Rather, what the subject appreciates in the experience of pain is that the whole thing – whatsoever the content – is in the form of an imperative, quite often with a very different *substance* (as one might say) from the content of the experience: WITHDRAW! STOP MOVING THAT LIMB! SEEK HELP![17] Pain experience shouts, putting its content in capital letters. Sometimes the subject interrogates the content of painful experience for further information. The point of doing that is to take action; it is not for the sake

[17] This is the grammar of 'good' pain, as Cervero illuminates – Cervero *Understanding Pain* (MIT Press, 2012). Chronic pain has a different grammar.

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of knowledge. The point of pain experience is to get us to take action. Just as the point of putting a phrase in imperative mood is to elicit a very specific sort of response from the second person. But that message of 'take action' is not in the *content* of the experience. It is instead in its *grammar*.

8. Descartes' error

I said that Descartes is entitled to 'subjectivity exists'. And to remark on subjectivity is to say something about the logic of experience. But to remark on subjectivity is to say something else too: it is to say that the object orientation characteristic of the inquiries we have been conducting has very little to say about *objects as such*. Ironic. But there is a reason as to why this must be so.

Windows and frames are one way of construing the opposite or negation of materiality. Precisely how is a window or frame an opposite of an object or substance? It is an opposite in a logical way, precisely in the way that a thing is to be distinguished from all that it is not. To 'set something off' is to articulate something, as to distinguish it from other things. This is the work of syntax. It grounds the distinction between *figure* and *ground* or *surround*, which is another way of characterizing the distinction between the object and that-which-is-not-the-object. This is quite similar to the distinction between content and 'container', which is obviously a logical distinction and does not direct attention to differences of substance. Because the container and contained need in no sense be different in kind, any more than a container need be different in kind from what it contains (boxes can lie within boxes, after all); the container is only different in its *function* or *role*, and that is always in relation to the attending *subject*. The subject and object stand in quite different roles in the relations of *subjectivity*. The assertion of subjectivity ('subjectivity exists') is an assertion about neither a particular object, nor a particular subject. Descartes was right that it doesn't matter what the object of attention is – its existence as an object of attention is evidence enough for the assertion of subjectivity. Equally – but on this point Descartes went astray – it doesn't matter what the occupier of the *subject* position is. And the assertion of subjectivity has no implications for either subject or object – its mere reality rules out nothing as either object or subject.

Descartes might easily have noticed this. He, more than anyone else, appreciated that spatial location is the marker of an object; more precisely, Descartes defined objecthood by the feature of concrete particularity. Now subjects, because of their spatial ties to the

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Cartesian origin, the center, also seem to exhibit spatial characteristics – the quality of concrete particularity, which defines objecthood. This should have tipped Descartes off to the fact that a subject is only *temporarily* missing from the object world, in precisely the same way that something out of view is missing. Subjects and objects enjoy their roles as a matter of the *logic* of a given episode of experience, not as a matter of ontology. Subject and Object are opposites, but not ontological opposites. Subject and Object are opposites, not in the way that matter and form might be thought of as opposites, nor in the way that thinking thing and nonthinking thing might be thought of as opposites, nor even in the way that existing and nonexisting might be thought of as opposites, but only in the way that gifter and giftee might be thought of as opposites. The relationship is purely logical. Nothing at all of an ontological or metaphysical nature need divide them – they need not differ in their materiality in any way. They differ in grammatical role within a certain *syntactically* structured activity.

Descartes was not alive to these nuances. He was not alive to the idea that sometimes what experience delivers is not content about objects at all, nor even content in the assertoric mode, but a kind of practical imperative to its subject: WITHDRAW! (in the context of acute pain) is one clear such message. And this is delivered in the 'grammar' of the experience, in its structure. The structure of experience is therefore something worthy of philosophical investigation in its own right. Descartes missed this point. Sartre managed only a half-truth on the matter.

Here are some basic facts one discerns when one points the scope directly at experience (in the way that phenomenologists used to insist upon). Experience comes with its elements fused. What a subject does in the first instance is first attend to its grammar. Once that has been clearly dealt with, the subject then separates elements of the experience, so as to reveal its content. And so the nature of the contents of perception is as-of parts to wholes. It is as of a jigsaw puzzle whose relations to one another are essentially those of fit, as parts, to one another and to the whole. To the extent that there are norms that we perceive in experience, they concern how things fit or relate together, either within the same experience or across experiences and experience types.

9. The logic of experience in cognitive science

The contents of experience are not elements of a sequence of those 'simple sensations' that Hume imagined: a color here, a shape there,

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for example. Experience, just as William James recognized, is a fusion of a profusion of elements, not clearly marked into segments initially:

> *[A]ny number of impressions, from any number of sensory sources, falling simultaneously on a mind* ***which has not yet experienced them separately****, will fuse into a single undivided object for that mind*. The law is that all things fuse that *can* fuse, and nothing separates except what must. … The baby, assailed by eyes, ears, nose, skin, and entrails at once, feels it all as one great blooming, buzzing confusion; and to the very end of life, our location of all things in one space is due to the fact that the original extents or bignesses of all the sensations which came to our notice at once, coalesced together into one and the same space. There is no other reason than this why 'the hand I touch and see coincides spatially with the hand I immediately feel' (1890: 488, emphases in original).

Ironically, philosophers in the modern period and beyond proposed that perceivers must *learn to integrate* sensations (interpreting them in the process) before meaningful perception of objects and events could happen for them. This so-called 'constructionist' approach, which dominated the perception psychology for hundreds of years thereafter, right through the 20th century, presupposed that the different forms of stimulation from the various senses must be integrated or organized in the brain and therefore posed a 'binding problem' for perception. The thought (still exercising many) is that sensory stimulation has to be united by a separate mechanism that somehow achieves a meeting of differently-coded information from different channels on some common ground.[18] What is so ironic, of course, is that the elements are initially already fused – and that's the problem! And what we learn over developmental time is to separate and focus.

It was not until J. J. Gibson pioneered what is now referred to as the 'ecological' view of perception that integrationist presuppositions vis-à-vis perceptual development were seriously questioned.[19]

[18] See, for example, Birch & Lefford 'Intersensory development in children', *Monographs of the Society for Research in Child Development*, **25** (1963); Friedes 'Human information processing and sensory modality: Cross-modal functions, information complexity, memory, and deficit', *Psychological Bulletin*, (1974) **8**:1, 284–310, and Piaget *The construction of reality in the child* (New York: Basic Books, 1954).

[19] In this Gibson was heavily influenced by James. See Heft *Ecological Psychology in Context: James Gibson, Roger Barker, and the Legacy of William James's Radical Empiricism* (London: Lawrence Erlbaum, 2001).

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Gibson held that different streams of information, as such, posed no special problem for unitary perception, because multiple processing of input is a norm in cognition. In fact, the senses are highly interactive and cooperate in the detection of invariant aspects of stimulus arrays – so much so that we should recognize only one 'perceptual system'. What Gibson did was focus psychologists' attention upon invariants in stimulus arrays – elements that remain constant across modalities. And he taught psychology that the first things of which an organism becomes perceptually aware and upon which anchored, may well not lie as content in any one sensory modality, but may instead lie in the higher-order invariants in the blooming and buzzing array. This is an Aristotelian idea.

Aristotle had postulated a 'sensus communis' – an *amodal* or *common* sense – which he thought was responsible for perceiving the qualities of things that were more general and not specific to single senses ('common sensibles'). According to Aristotle, common sensibles included motion, rest, number, form, magnitude, and unity. This inventory has a strong resemblance to lists of the amodal by contemporary perceptual theorists following Gibson's lead.[20]

The conceptual keys to unlocking how detection of such qualities is achieved are *overlap* and *redundancy*. As Aristotle observed long ago, amodal information is not specific to a particular sensory modality but is information common to several senses. Such things as temporal and spatial features of a scene are typically conveyed in multiple senses: the rhythm or rate of a ball bouncing or hands clapping are good examples. Rhythm in both cases can be picked up both visually and acoustically. And when it is conveyed in overlapping media (as in these examples), the redundancy makes the temporal features highly salient. And so understanding the pickup of amodal information involves understanding the production of salience – a topic that is still in its infancy.

A vast body of research conducted over the last 25 years of the 20th century confirms that even young infants are adept perceivers of

[20] J.J. Gibson *The ecological approach to visual perception* (Boston: Houghton Mifflin, 1979); E.J. Gibson *Principles of perceptual learning and development* (New York: Appleton-Century-Croft, 1969); Bahrick & Pickens 'Amodal relations: The basis for intermodal perception and learning in infancy' in D. J. Lewkowicz & R. Lickliter (eds), *Development of intersensory perception: Comparative perspectives* (1994) (205–233); Marks, *The unity of the senses* (New York: Academic Press, 1978); Stoffregen & Bardy 'On specification and the senses', *Behovioral and Brain Sciences* (2001) **24**: 195–261.

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amodal stimulation.[21] Infants detect the temporal aspects of stimulation such as synchrony, rhythm, tempo, and prosody common to visual and acoustic information that proceeds from single events, as well as spatial colocation of objects and their sound sources, and changes in intensity across the senses. 'These competencies', as Bahrick and Lickliter write, 'provide the foundation for the perception of meaningful and relevant aspects of stimulation in social and nonsocial events ... In our view, detection of amodal information in early development provides a radical and efficacious solution to the so-called `binding' problem ... The task of development becomes to differentiate increasingly more specific information from the global array through detecting invariant patterns of both multimodal and unimodal stimulation.'[22]

10. The logic (not the metaphysics) of subject- and object-hood

Descartes thought he had discovered a new substance – the soul or mind. Hume by contrast, was skeptical that there is any such entity, given what he viewed as the flimsy evidence of experience. He was happy enough with thoughts, but not with any hypostatized thinkers. He saw no evidence for one, so he denied the existence of the Self.

But the logic of experience endorses neither of these positions. The content of experience, taken together with its grammar, sheds no light whatever on the subject of selves. However if one admits the reality of experience, with its attendant logic, one cannot deny *subject-hood*. And the reality of subjecthood neither requires nor forbids the affirmation of a Self as an entity. It is an independent

[21] Bahrick and Pickens 'Amodal relations: The basis for intermodal perception and lerarning in infancy' (op.cit note 18); Lewkowicz 'The development of intersensory temporal perception: An epigenetic systems/limitations view', *Psychological Bulletin* (2000) **26**: 281–308; Lickliter & Bahrick 'The development of infant intersensory perception: Advantages of a comparative convergent-operations approach' *Psychological Bulletin* (2000) **126**: 260–280; Walker-Andrews, 'Infants' perception of expression behaviors: Differentiation of multimodal information', *Psychological Bulletin* (1997) **121**: 437–456; Walker-Andrews & Bahrick 'Perceiving the real world: Infants' detection of and memory for social information' *Infancy* (2001) **2**: 469–481.

[22] Bahrick & Lickliter 'Intersensory redundancy guides early perceptual and cognitive development', in R. Kail (ed.), *Advances in Child Development and Behavior*, (New York: Academic Press, 2002), 153–187.

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question entirely what it takes to be the kind of entity that can enjoy experience in a first-personal way – and whether such entities exist.

To conclude, then: the in-itself / for-itself distinction is logical, not metaphysical. And the same goes for the Subject/Object distinction. Subject-hood is part of the logic of experience; experience is 'first-personal' in a very distinctive sense – in the sense that it is as-though presented to a viewer. It comes 'centered' around an 'I' on whom/which it depends. Does this logic of experience tell us anything about this 'I' at its center? No. Of course there is a question as to how it is possible that an entity in the world can enjoy experience. That is indeed a metaphysical question that deserves an account in metaphysical terms – terms that communicate exactly the sort of category the entity in question needs to belong to in order to be susceptible to experience. But that question can in no way be answered by attending to the logic of experience. It can in no way be answered by attending to what that experience is like 'from the inside'. Furthermore it is not at all clear that there is only one sort of entity that can enjoy experience as so described.

Still, while focus upon the logic of experience does not reveal any existents, it does nonetheless *gesture at* an 'I' that is always-perched on its horizon. It points to the 'I' without revealing it. What contribution does that 'I' make to experience? What is its function? How does it advance the 'work' of experience? These are the questions we might expect the human social and cognitive sciences to address.

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