The name of Descartes has become synonymous with “dualism”. A thesis of dualism would seem to presuppose that each of the things of which there are said to be two, is in itself one. Notoriously, what Descartes says about mind-body unity is puzzling. Equally puzzling is what Descartes says about the unity of the soul and the unity of the human body. The modest aim of the following pages is to shed some light on these puzzles - if only perhaps by generating further puzzles. Our contention is that the notion of unity or of an individual in Descartes’s ontology of everyday life is a functional concept. Taking seriously the implications of this point has ramifications both for how the unities of mind and body and their separateness are to be understood.

We begin with a number of puzzles generated by Descartes’s use of the notion of a unity. First, there is the claim that the mind is a simple, undivided substance. [Meditation VI] Yet there is the obvious fact of discord when, for example, we are driven by a desire or passion against our will. In Cartesian terms
the answer may seem simple: The passions are in the soul, the soul is simple, its
self-knowledge perfect, and its will infinite. The passions, however, are rooted in
the body which causes them; the soul, as Descartes explains to Arnauld, is not
conscious of events in the body [July 29, 1648; AT V, 221-2; CSMK, 357]; and
the will cannot directly suppress a passion [Passions, Article 45].

But Descartes as we shall see is no simple Cartesian. A complication
immediately arises in light of Descartes’s scattered remarks about the union of
mind and body. A human being is a composite of mind and matter. It is not itself a
substance in Descartes’s ontology which includes only substances and modes.
[Principles, I, 48] The union does not, moreover, have a principal attribute, the
mark of a substance, and therefore cannot support modes in its own right.
Nonetheless, a human being is a “substantial union.” More striking yet, as
Descartes advises Regius, the human being is an ens per se.

And whenever the occasion arises, in public and in private, you should give
out that you believe that a human being is a true ens per se and not an ens
per accidens, and that mind and body are united in a real and substantial
manner. [AT III, 493; K, 127]
What principle of unity is Descartes using here? Implicit in what we have cited so far are the notions indivisibility and simplicity. Clearly, these notions will not suffice to explicate the unity of mind and body. Nor, one would think, will it do for the case of the unity of the human body. In the *Sixth Meditation*, one of the arguments for the distinctness of mind and body depends upon the fact that whereas the mind is indivisible, matter is the paradigm of divisibility.

The body is by its very nature always divisible, while the mind is utterly indivisible. For when I consider the mind, or myself insofar as I am merely a thinking thing, I am unable to distinguish any parts within myself; I understand myself to be something quite single and complete. [AT VII,85-6; CSM II, 59]

Nonetheless, in a letter to Mesland, Descartes refers to the “numerical unity” of the human body which “even though [its] matter changes and its quantity increases or decreases, we still believe that it is the same body.” [February 9, 1645; AT IV,166; CSMK, 359] Here the divisibility of the human body, the fact that it continually loses and gains matter, is no impediment to its individuality. Worse still for the argument from the *Sixth Meditation*, Descartes admits to an equivocation in the way “body” is used. In the case of body in general or the indeterminate matter making up the entire universe, its divisibility affects its numerical identity. By
contrast, the divisibility of the body conjoined to a particular soul does not affect its unity. It follows that the notion of ‘indivisibility’ is also ambiguous.

In that sense, it [the human body] can even be called indivisible; because if an arm or a leg of a man is amputated, we think that it is only in the first sense of ‘body’ that his body is divided - we do not think that a man who has lost an arm or a leg is less a man than any other.[AT IV, 167; CSMK, 243]

The argument in the Sixth Meditation would thus seem to rest on an equivocation in the use of the term ‘body’: an unfortunate situation since it fills an obvious lacuna in Descartes’s argument for the real distinction of mind and body. In his questions about the Second Meditation, Hobbes put his finger on a crucial difficulty when he pointed out that a thinking thing might well be corporeal. Descartes answers:

I certainly did not assume the contrary, nor did I use it as the ‘basis’ of my argument. I left it quite undecided until the Sixth Meditation, where it is proved. [AT VII, 175; CSM II, 123]

So Descartes is quite aware that having proved only that $p$ does not entail having proved that only $p$. The distinction between mind and body based on the
indivisibility of the former and divisibility of the latter is intended to provide missing proof that the mind is not an extended thing.

The interpretative task we face is to decide whether these are pseudo problems or not. If the problems are real, we should see Descartes as someone for whom dualism became an increasingly untenable position. Although we are somewhat inclined to this view, we believe that it is more accurate to say that Descartes shifts his focus in his later years towards the topic of the natural union of mind and body without ever renouncing their metaphysical distinctness. Our task here will be to show the extent to which this hypothesis allows us to view the apparent contradictions as pseudo-problems.

Some simple solutions:

Each of the unities we have looked at so far - the unity of the mind, of the body and of the mind and the body - is presented as both a single thing and a multiplicity. The soul is one thing but its passions and will struggle for supremacy. The union is a substantial union but composed of distinct substances. The body is divisible in one sense, indivisible in another. There are other instances of this pattern in Descartes. A passion of the soul and action of the body which causes the passion are modes of distinct substances but they are, for all that, *une mesme chose.*
[Article 1, *Passions*] One solution would be to say that in each case there is only the appearance of both unity and multiplicity. Consider, for example, what Descartes says in Article 47 about the apparent conflict within the soul:

There is no conflict here except in so far as the little gland in the middle of the brain can be pushed to one side by the soul and to the other side by the animal spirits (which, as I said above, are nothing but bodies), and these two impulses often happen to be opposed, the stronger cancelling the effect of the weaker. [AT XI, 365; CSM I, 346]

The “solution” seems to consist in a model far cruder than Plato’s tripartite *Republic* model, in which there are three potentially conflicting agencies in the soul: in this case, it seems there are, instead, just the simple soul in conflict with the body. When the passions seem pitted against the will, it is really only the will being resisted by the proximal causes of the passions in the brain.

This solution is unsatisfactory for two reasons. First, it seems to conflict with the alleged separation of mind and body. As Leibniz patronizingly remarked: if Descartes had known about the law of conservation of momentum, “he would have hit upon my system of pre-established harmony” (Leibniz 1991,§80) Since the soul and body battle for control of the pineal gland, it would appear that the
soul, an immaterial substance, can add momentum or motion. Descartes might have responded that the soul controls the \textit{direction} not the \textit{quantity} of motion, in accordance with his own conservation laws. But even a mere change of direction would seem to require the application of some force. In any event some further story is required.

Second, are all prima facie conflicts within the soul really conflicts between the soul and the body? Mastery of the passions is an essential component of virtue for Descartes and, although such mastery requires the ability to influence processes in the body, the fact that mastery is an issue suggests that the soul is aware of itself as having modes which limit its rational functions. If this isn’t what was traditionally thought of as having a divided mind, we are not sure what it is. Many philosophers old and new have argued against the unity of the mind on precisely these grounds, including some, like Kant, who sought ingeniously to have it both ways. It seems we have to have it both ways, in fact, since it is somehow obvious that each of us is an individual, and equally obvious, as Richard II observed, that “we play in one person many parts.” This suggests that there is not just a single dispute between, say, Descartes and Hume, about whether or not there is something inside me called my self of which I can simply observe the simplicity.
On the apparent conflict between the unity of mind and body and Descartes’s dualism, it has seemed attractive to some commentators to adopt a deflationary stance. It has been argued, for example, that Descartes’s talk of the union is not really talk of an individual thing but merely an attempt to capture the phenomenology of our (metaphysically misleading) experience of a relationship with a body. Bernard Williams remarks, for example, that the notion of the union carries “little metaphysical weight” for Descartes. The experiences of the union are the “confused and obscure” ideas we have of being affected by and affecting the body and not the clear and distinct ideas upon which to base any metaphysical claims.

Descartes himself is guilty of a certain degree of deflationism. As he remarks to Elizabeth (June 28, 1643):

It does not seem to me that the human mind is capable of forming a very distinct conception of both the distinction between the soul and the body and their union; for to do this it is necessary to conceive them as a single thing and at the same time to conceive them as two things; and this is absurd. [AT III, 693; CSMK, 227]
But whether this remark signals, as Margaret Wilson worries, “an overt admission on Descartes’s part that his position on the mind/body relation is self-contradictory" is not clear. (Apparently a good Jesuit education empowered one to conceive of something being both one and three but not of anything being both one and two.) Elsewhere the notion of mind-body union is supposed to do real theoretical work in explaining distinctions between modes:

Perception, volition and all the modes of perceiving and of willing are referred to thinking substance; while to extended substance belong size, shape, motion, position, divisibility of component parts and the like. But we also experience within ourselves certain other things which must not be referred either to the mind alone or the body alone. These arise…from the close and intimate union of our mind with the body. This list includes, first, appetites like hunger and thirst; secondly the emotions or passions of the mind which do not consist of thought alone…; and finally, all the sensations, such as those of pain, pleasure, light, colours, sounds, smells, tastes, heat, hardness and the other tactile qualities.[AT VIII A, 23; CSM I, 209]

Nevertheless, what distinction can be drawn between the union of mind and body and the very fact of their interaction such that the former is capable of explaining
the latter? Wilson argues that on the most plausible reading which she refers to as
the “Natural Institution” theory, the union is nothing other than the interaction
between mind and body. Talk of the the union just is talk of the arbitrary
 correspondence between events in the mind and events in the body. On this
reading, Descartes’s claims to having experienced the union are strictly speaking
false. The mind only experiences one side of the equation: the sensations and
 passions of the soul. If Descartes’s conception of mind/body union is “weightier”
than his critics have allowed, it must be a notion which is not simply reducible to
the idea of interaction.

When we turn to the unity yet divisibility of the human body, we see
Descartes asserting, against a long tradition of thinking of matter as the principle
of individuation, that it is the human body’s relationship to the soul which makes
it a one. The human body remains one and the same despite being constituted at
different times by different parts of extension. In the same passage where
Descartes speaks of the term ‘body’ as ambiguous and of the body as in some
sense indivisible he also writes:

Consequently I do not think that there is any particle of our bodies which
remains <numerically> the same for a single moment, although our body,
qua human body, remains always the same so long as it is united with the same soul. [AT IV, 167; CSMK, 243]

Clearly, the individuality of the human body is derived from that of the soul with which it is united which is why its unity is not affected through having an arm or leg amputated. At some point, however, with enough bits sawn off, we would cease to regard a chunk of matter as no “less a man than any other”. Putting aside the Eucharist, in the natural case, it cannot simply be the attachment of the soul to any matter at all which constitutes it as a single human body.

The solutions canvassed above are thus inadequate. Fortunately, where Descartes is concerned, there is always more to be said.

Two Notions of Unity.

We have been operating on the assumption that whether something is a unity or not depends on whether it is divisible or not. But what is it to have or not to have parts?

The metaphor of multiplicity has been used in a variety of ways in theories of mind. Here are the two most important ones:
1. **Agencies:** The image this model generates is of relatively autonomous homunculi or subsystems which can conflict and are complete in themselves. They must be complete, in a sense, since their functions must be duplicated to some extent in order to allow them to conflict. This model goes back to Plato's tripartite incorporeal soul and Galen’s adaptation of the Platonic model for corporeal souls but is also exemplified in Freud's later work and in some more recent neurophysiological models. (Plato 1997 *Rep.* 435ff.) (Galen,?) (Freud 1964) (MacLean 1975). The metaphor of a group or mini-society describing a person, however, requires further explication, since taken literally it is threatened with regress. For if we don't know what a person is, it’s not obvious that we can know what a group of persons is.

2. **Functions:** The function of an organ is the role it plays, or is supposed to play, in the overall working of the whole organism. Talk of different functions is not necessarily talk of separate parts. The important point for our purposes is that one and the same thing can perform many distinct functions. (Think of a Universal Turing machine.) This second model is represented by Aristotle, (*de An*, III-9, 1984), Piaget (1971) and some modern versions of functionalism (Fodor 1983). Along with the notion of a function comes the idea of a functional unity. Insofar as the “parts” of a functional system, its capacities to perform certain functions,
contribute to the functioning of the system as a whole, they do not, therefore, normally conflict. Indeed, functions cannot compete because by definition they are not in the same business, though in some versions, including Aristotle’s own, they are hierarchically arranged, so that some levels or functions presuppose and build on the capacities of others. But they are distinct without being capable of separate existence.

Functional Unities.

How might these different ideas of what it is to have parts help us understand the Cartesian unities of mind and body?

Let us consider first the unity of the soul. In the more recent history of the philosophy of mind, there are many models similar to both Plato’s and Aristotle’s in different ways. Think, for example, of those commonly referred to in terms of the “modularity” of mind or brain. Some of them are more like Aristotle’s in that they represent functions which couldn’t logically compete. These could still, however, compete for resources of some kind; but on the other hand they are also like little agencies insofar as they could actually offer different solutions to the same practical problem. The two hands of the split-brain patient literally pushing against each other as each brain hemisphere apparently attempts to implement a
different action plan make the brain hemispheres sound more like Plato’s agencies (Gazzaniga 1993); on the other hand, the parts of the brain that control digestion, say, might be utterly separate from those that control vision. This is the sort of idea about “separateness” in the brain that has led some brain researchers to a simple yet ingenious research program which aims at mapping the brain by looking for interference in the performance of common tasks (Kinsbourne 1985).

Where does Descartes stand in relation to these models? On one occasion, arguing for the simplicity of the soul, Descartes seems to anticipate the research strategy just mentioned in looking for patterns of interference in the soul’s performance of its definitive functions. The passage in question occurs in the first of his Regulae, where he points out that while excellence in one art generally precludes excellence in others, it does not follow that the same holds true of science:

They recognize that one man cannot master all the arts at once and that it is easier to excel as a craftsman if one practises only one skill; for one man cannot turn his hand to both farming and harp-playing, or to several different tasks of this kind, as easily as he can to just one of them. This has made people come to think the same must be true of the sciences as well. Distinguishing the sciences by the differences in their objects, they think that each science should be studied separately, without regard to any of the
others. But here they are surely mistaken. For the sciences as a whole are nothing other than human wisdom, which always remains one and the same, however different the subjects to which it is applied, it being no more altered by them than sunlight is by the variety of things it shines on...for the knowledge of one truth does not, like the skill in one art, hinder us from discovering another; on the contrary it helps us. [AT X, 359-60; CSM I, 9]

The diagnosis here seems to have to do with the fact that the arts require the intervention of the body, whereas the mind in its unity is all that is involved in knowledge. Indeed, while excellence is possible only in one or two arts, it may be that excellence in science requires excellence in them all.

Other diagnoses are also plausible. (1) The unity of the subject is not prejudiced by the diversity of objects; an anticipation of the transcendental unity of apperception. (2) The brain receives images of concrete particulars; the mind deals in abstract general ideas, “as the day is one and covers everything” as Plato said.[Parmen. 131b-c] Hence, the two are not in the same business. (3) The soul differs from the brain in that general cognition or “universal wisdom” is essentially different from the specialized arts of the brain: an anticipation of the thesis of Jerry Fodor’s _Modularity of Mind_. (4) In “folk psychological” terms, to quote George Lakoff, a person is “split into Subject (consciousness, perception,
will, and judgment) and the Self (everything else).” [Lakoff 1992,9] These are all very dualistic conceptions of the person according to which the divisions between functions of the mind and functions of the brain are strict. But does this picture fit the idea of the person in Descartes’s “mature” philosophy? Even in the Meditations we see that some of the primary functions of the soul (perceptions, affects, volitions which terminate in the body) require the co-operation of the body. Being acted upon by the body, the mind is described as “dependent” and subject to various limitations, especially those related to the functions of (corporeal) memory and imagination. Could not these be cases of the soul’s operations being interfered with by the body?

We must look elsewhere for a defensible conception of the unity of the soul. The fundamental idea is that it is the whole soul which senses, reasons, desires and wills. It is appropriate to speak of different functions of the soul but, in contrast, with the Platonic model, these are not to be equated with parts:

It is an error to identify the different functions of the soul with persons who play different, usually mutually opposed roles – an error which arises simply from our failure to distinguish properly the functions of the soul from those of the body. It is to the body alone that we should attribute everything that can be observed in us to oppose our reason. [AT XI, 364-5; CSM I, 346]
The unity of the soul is, in this respect, a functional unity. Not only are its tasks ones that can be performed by a single subject, they are tasks which themselves are not really distinct: “it [the soul] is at once sensitive and rational too, and all its appetites are volitions.” [AT XI, 364; CSM I, 346; AT VIIIA, 13-14; CSM I, 201]

This stands to reason for in Descartes’s ontology, sensations, appetites, volitions and understandings are all modes of the soul and being modes are neither really distinct from the soul itself nor from each other. [Principles I, 61]

This is not to say that there is no metaphysical distinction between modes of the mind – they are modally distinct, meaning simply that the soul could exist without any one of them. But this distinction does not warrant a distinction of parts or “faculties” within the soul. As Descartes write to Mersenne (October 16, 1639), the diversity of objects of thought no more warrants the attribution of distinct faculties than it follows from the capacity of the wax to take on infinitely many shapes that it has infinitely many faculties. [AT II, 598] Again the worry is that talk of faculties will lead ignorant people to suppose a diversity of “little entities in our soul”. Here Descartes seems sensitive to the problem that the explanation of the functions of the soul is not assisted by positing a multitude of soul-like faculties. Instead the soul gains all its knowledge by reflection either upon itself or upon the various dispositions of the brain. [AT II, 598] But what
about the sort of capacities which phrenologists thought were governed by different parts of the brain causing cranial “bumps”?

Are these to be understood as faculties and associated with different parts of the brain? Are they merely, as Fodor implies in *Modularity*, anticipations of the “faculties” of modern cognitive science -- which themselves fall into modular, “domain-specific computational systems” and non-modular “central” or “cognitive systems” (Fodor, p. 101) “sensation and perception, volition and cognition, learning and remembering, language and thought” (Fodor p. 1)? Are we to think of corporeal imagination and memory, for example, as distinct faculties of the brain?

To some extent, Descartes identifies these functions with distinct regions of the brain. [AT III, 48; CSMK, 145-6] But he is also apt to speak of such functions as distributed more widely in the body: for example, part of the memory of the lute player is in his hands.[ AT III, 48; CSMK, 146] Again the governing idea is one of functional unity rather than a multiplicity of distinct faculties.

The unity of mind and body can also be construed as a functional unity. Consider the extraordinarily weird argument from the *Passions* in which Descartes advances the view that the pineal gland must be the link between body and soul because we need a *funnel*:
…all the other parts of our brain are double, as also are all the organs of our external senses – eyes, hands, ears and so on. But in so far as we have only one simple thought about a given object at any one time, there must necessarily be some place where the two images coming through the two eyes, or the two impressions coming from a single object through the double organs of any other sense, can come together in a single image or impression before reaching the soul, so that they do not present to it two objects instead of one. [AT XI, 352-3; CSM I, 340]

The mind receives its sensory ideas and passions as single ideas from the brain. Images in the brain, particularly retinal ones, are duplicated because of the two eyes and hemispheres of the brain. Hence, there must be a single organ in the brain responsible for collating sensory images and mediating between the mind and the body.

As an argument for the necessary function of the pineal gland, this explanation seems naïve. What interests us, however, are not the merits of this particular argument but the way in which Descartes is thinking of the human being as a functional whole.
This has consequences for the metaphysical problems surrounding the union of mind and body. Recall, the union of mind and body is supposed to be a “substantial union” without being a substance. More mysterious yet, although Descartes rejects the substantial forms and real qualities of Scholastic and Aristotelian thinkers like Aquinas, he is prepared to speak of the human soul as the substantial form of the human body.[AT III, 503; 505] Indeed, it is part of his rejection of substantial forms generally, that thinking of qualities as “so many little souls [attached] to their bodies” which can be separated by divine power, is anthropomorphic.[AT III, 648; CSMK, 216] True, the soul is the only candidate for being a substantial form since the Real Distinction argument guarantees its separability from the body. But none of this makes Descartes’s hylomorphism any more acceptable. Understood one way, Descartes’s hylomorphic conception of the human being is incoherent. The soul is a substance in its own right. It does not seem plausible that the soul is also a quality of the body. Understood another way, the ontological situation is merely that of parallelism between two distinct substances but then whatever the union is it does not warrant the attribute “substantial.”

The source of this dilemma is a rather common misunderstanding of how Descartes conceives of the union of mind and body. It is assumed that there are two substances which are metaphysically prior to the union. It is tempting to think
that when these are conjoined they must either make up some third substance, which Descartes does not claim is so, or not really constitute an individual at all, as Leibniz would have it. But are there really two distinct substances to start with? Let us go back to the letter to Mesland in which Descartes defines what he means by the ‘human body’. Having defined what he means by ‘body’ in general, Descartes asserts:

But when we speak of the body of a man, we do not mean a determinate part of matter, or one that has a determinate size; we mean simply the whole of the matter which is united with the soul of that man. And so, even though that matter changes, and its quantity increases or decreases, we still believe that it is the same body, numerically the same body, so long as it remains joined and substantially united with the same soul; and we think that this body is whole and entire so long as it has in itself all the dispositions required to preserve that union.[AT IV, 166; CSMK,243]

We suggest that this passage contains the key to understanding Descartes’s hylomorphism. As we remarked earlier, the soul is the principle of individuation for the body: it is what makes a human body numerically the same through time and changes in its matter. We might also say that the soul is the principle of actualisation for the body: it is what makes (continually replaced) chunks of matter
a human body. This is what Descartes’s hylomorphism amounts to and why it is correct to speak of the union as a substantial one. The human body is not an individual substance in its own right. Strictly speaking, since the notion of a substance is defined in terms of its independence from other (created) substances, the human body is not, qua human body, a substance although it is constituted by one. This may also explain why the notion of the union is, as Descartes explains to Elizabeth, a “primitive” one. [AT III, 665] It is not analysable in terms of the notions of mind and human body because the latter is not, for Descartes, ontologically primitive.

This last claim is, however, puzzling. A primitive notion for Descartes seems to be one which cannot be analysed into other clear and distinct ideas being understood “only through itself”. [To Elizabeth, May 21, 1643; AT III, 665; CSMK, 218] Yet we have, by the end of the Meditations, clear and distinct ideas of mind and matter, the two substances presupposed by the existence of the union. It should be possible, on Descartes’s view, to derive all the modes of a substance from a clear and distinct idea of it. Primitive notions are “patterns on the basis of which we form all our other conceptions.” [AT III, 665; CSMK, 218] The problem is that our clear and distinct ideas of mind and matter, and of their principal attributes, thought and extension, are insufficient to explain all the modes of mind and body which depend on their union. Given the inability of our primitive notions
of mind and matter to explain modes which depend on the union, we need a primitive notion of the union itself “on which depends our notion of the soul’s power to move the body, and the body’s power to act on the soul and cause its sensations and passions.” [AT III, 665; CSMK, 218]

The latter are functions which only mind and matter existing in a union can perform. In replying to More, Descartes denies that either a separated soul or an angel non-substantially united to a body have sense perception *sensu stricto*. [AT V, 402] An angel might be able to receive sensory information about a body but only as a pilot in a ship or ghost in a machine, to use the Rylean metaphor, not as a *subject of sensations*.

There are thus metaphysical and conceptual constraints on treating the notion of the union as reducible to the concepts of mind and matter. The effect of the conceptual irreducibility of the notion of the union is that we should feel free, as Descartes suggests to Elizabeth, to predicate “matter” and “extension” of the soul “because that is simply to conceive it as united to the body.” [AT III, 694; CSMK, 228] None of this is supposed to conflict with our ability to conceive of mind and matter as really distinct. We seem, however, to be left with competing ideas of what a person is: (a) an irreducible (non-technical) notion of a unified person and (b) clear and distinct ideas of the two substances which constitute the
ontological substrata for persons. What, in the final analysis, is a Cartesian person?

We suspect that there is no single answer to this last question. Understood functionally, the person is an entity which has sensations and passions and can will itself to move. Understood metaphysically, a person is a composite of mind and matter. Compare recent debates between functionalists and materialists. Ask what is a pain and one is likely to get two replies: one describing the functional role of pain; the other describing the neurophysiological substratum, the infamous firing of C-fibres. Whether these replies are compatible with one another or whether we must choose between them has been the subject of much debate. Whether, in the end, Descartes’s dualistic conception of the human being is compatible with his functionalist conception is also a matter for reflection. But whatever the outcome it seems clear that in Descartes’s mind there is no tension between the two approaches. We shall return to this question in the final section.

We are also in a better position now to see why Descartes regards the human body as a one and in some sense “indivisible”. To remain united to the soul it must retain all the “dispositions required to preserve the union”. This is a statement about the functions the body performs in the service of the union not about the body as matter “in general” which is to be understood solely by
reference to the laws of mechanics. The correct science for the human body, *qua human body*, as the *Passions* and *L’ Homme* demonstrate, is not mechanics but neurophysiology. From this perspective, the body is composed of three integrated systems: the vegetative (nutritive and reproductive), cardiovascular and nervous systems and three corresponding “spirits”: natural, vital and animal spirits. As a functional unit the body can only be subject to so much division. It may survive the loss of a limb but not the destruction of a vital organ.

Thinking of Descartes as a functionalist when theorizing about the unities of mind and body gives us a way of getting beyond the simple solutions canvassed earlier. To summarize: the simplicity and unity of the soul is seen to depend not merely on the vain hope that the soul suffers no disharmony (which remains, nonetheless, Descartes’s view) but on the idea that the soul as a *whole* performs each and every one of its cognitive tasks. The union of mind and body, meanwhile, is seen to have more “metaphysical weight” than deflationists have allowed since it is only in terms of the union that we have a substantial notion of the human body. Finally, the unity of the body and its indivisibility is connected with its status as a human body which in no way conflicts with its divisibility as part of body in general.

*Methodological Problems:*
How tenable is Descartes’s dualism in light of his remarks about mind-body union? There are two problems to consider. The first concerns Descartes’s method in the argument for dualism: if two things can be completely conceived independently of one another, they are really distinct. The second concerns what we have argued to be the implicit functionalism in Descartes’s analysis of the person. Let us take each of these problems in turn.

The *Regulae*, although a somewhat unreliable source, at least indicates that Descartes was aware that the process of abstraction, thinking of a feature of a thing separately from other features of the thing, does not entail any separation between these features in reality.

If, for example, we consider some body which has extension and shape, we shall indeed admit that, with respect to the thing itself, it is one single and simple entity. For, viewed in that way, it cannot be said to be a composite made up of corporeal nature, extension and shape, since these constituents have never existed in isolation from each other. Yet with respect to our intellect we call it a composite made up of these three natures, because we understood each of them separately before we were in a position to judge that
the three of them are encountered at the same time in one and the same subject.  
[AT X, 418; CSM I, 44]

Let us pause and consider what is puzzling about this last sentence. Both parts of it stretch credulity. How could we have represented these three “parts” to ourselves separately, and how could we have failed to realize that they might be united in a single subject? Unless the first includes certain ideas of hardness which might not, say, apply to such figured and extended things as clouds, none, surely, could exist in isolation from the others. Descartes himself point out that

…shape is conjoined with extension, motion with duration or time, etc., because we cannot conceive of a shape which is completely lacking in extension, or a motion wholly lacking in duration. [AT X, 421; CSM I, 45-6]

When we come back to the Meditations from having read the Passions, however, it seems that something that looks very much like abstraction: thinking of mind and matter in abstraction from the union is a sufficient reason for thinking they are distinct in reality. Witness Descartes’s own words, in the Sixth Meditation, against a representationalist view of perception -- words which were they not French (or Latin) might have been penned by David Lewis:
…although I feel heat when I go near a fire and feel pain when I go too near, there is no convincing argument for supposing that there is something in the fire which resembles the heat, any more than for supposing that there is something which resembles the pain. There is simply reason to suppose that there is something in the fire, whatever it may eventually turn out to be, which produces in us the feelings of heat or pain. [AT VII, 83; CSM II, 57]

This last remark suggests that we can’t take for granted the phenomenology of experience as a guide to the nature of reality. So why should we believe that while the representation theory of ideas is wrong in general, it is right in the case of the mind?

According to the Real Distinction argument, it seems to be that what could be separate is so: arguing from possible to actual. That is not quite right for Descartes’s point is that mind and matter can be completely conceived without making reference to the principal attributes of each other. Unlike the inseparable pairs mentioned above - shape and extension, motion and duration – mind and matter can be conceived of as existing separately. You might say that it is a kind of ontological proof of the separability of the soul. If the essence of X is that property without which X would not be itself, then we can agree that I would not
be myself if I didn’t think. But that doesn’t show I would still be myself if I had no body. For I (this thinking being) might not exist at all. That, if it wasn’t Hobbes’s point, is close to its spirit.

A more plausible strategy, and one which accords with Descartes’s remarks about the irreducibility of the notion of the union, would be to treat the separate concepts of mind and body as abstractions in the Regulae sense. One would not need to deny that, by an act of God, mind can exist independently of body but by an act of God not much is out of the question anyway. Disembodied minds, the Eucharist, angels – all are within the realm of the possible. But as far as what is actually the case for human beings “in this life” the more palatable idea to come out of the Cartesian corpus is that irreducible concept of the union of mind and body.

This brings us to our second point. We have argued that it is only from Descartes’s functionalist perspective (as opposed to his strictly metaphysical perspective) that the ideas of the indivisibility of the body and the simplicity of the soul make sense. For the human body the idea of functional integration of subsystems is paramount whereas the unity of the Subject in the face of the diversity of its objects secures the soul’s claim to simplicity. The simplicity of the soul entails the complete transparency of the soul and the pure autonomy of the
will. Yet Descartes raises questions against both these ideas. On the first:

*Meditation II* asked rhetorically:

What, I ask, is this ‘I’ which seems to perceive the wax so distinctly? Surely my awareness of my own self is not merely much truer and more certain than my awareness of the wax, but also much more distinct and evident.  
[AT VII, 33; CSM II, 22]

and he still maintains something similar even with respect to the passions:

…the passions …are so close and so internal to our soul that it cannot possibly feel them unless they are truly as it feels them to be. [Article 26; AT XI, 348-9; CSM I, 338]

Yet almost in the same breath he also admits that

…experience shows that those who are the most strongly agitated by their passions are not those who know them best, and that the passions are to be numbered among the perceptions which the close alliance between the soul and the body renders confused and obscure. [Article 28, AT XI, 349-50; CSM I, 339]
It therefore seems to be a major admission of limitations on the will itself (and not merely its effectiveness) to grant that we cannot always control the passions:

…[the soul] can easily overcome the lesser passions, but not the stronger and more violent ones, except after the disturbance of the blood and spirits has died down. [Article 46, AT XI, 364; CSM I, 345]

Much of Descartes’s later correspondence with Elizabeth and the final part of *Passions* is concerned with mastery of the passions and the absolute freedom of the will. But the whole outlook of the *Passions* is a surprisingly biological one, in which the *utility* of the passions is repeatedly stressed. Against this idea of a unified person suffering the contingencies of life in an unpredictable environment, complete mastery of the passions and the hegemony of the will against the inclinations of nature can only extend so far. Moreover, in this quasi-biological perspective, the simplicity of the soul makes little sense and ceases to have much motivation. There seems little gain beyond not infringing on the goodness of the Creator in explaining away conflicts within the soul in terms of conflicts between mind and body. Understood as a functional whole, the human being is no more divided into competing “little entities” than is the soul itself. Such considerations spell to us the beginning of the end of dualism.
This, it seems to us, is the best proof of Descartes’s greatness. For there are just two marks of supreme genius in a philosopher: one, to build a whole system around a completely lunatic idea, and two, to begin the enterprise of refuting it. The *Meditations* secure Descartes’s title to the first; the *Passions*, to the second.
NOTES

1 In a letter to Regius of January 31, 1642, Descartes writes that it is more important to teach the
distinctness of mind and body than the union since more make the mistake of denying the former than the
latter. [AT III, 508; CSMK, 209]
2 Descartes concedes to Elizabeth that the mind would be more easily contented were it in a position to
exercise only its reason. [October or November, 1646; AT IV, 528-9; CSMK, 296]
another deflationary account see Fred Sommers, “Dualism in Descartes: The Logical Ground,”
Descartes: Critical and Interpretative Essays. Michael Hooker, ed. (Baltimore: Johns Hopkins University
4 See Lilli Alanen,
6 Ibid., p.218.
7 Ibid., p.216.
8 This doctrine remains enshrined in the French language in which avoir la bosse de…[e.g., des maths]
(“to have the bump for …[e.g., math]”) means to have a talent… [e.g., for mathematics].
9 Compare, however, Paul Hoffman’s, “The Unity of Descartes’s Man,”
10 See, for example, David Lewis, “Mad Pain and Martian Pain,” and Jaegwon Kim,
11 See Marlene Rozemond, Descartes’s Dualism