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Plato's Conception of the Self

The Mind-Body Problem and its Ancient Origin in the Timaeus

Jaegwon Kim, the well-known philosopher of mind, opens his recent book Physicalism or Something Near Enough with a trenchant statement: "... as every student of Western philosophy knows, Descartes, who arguably invented the mind-body problem...". In order to defend his physicalist view. Kim assumes as a theoretical background what he takes to be the standard formulation of the mind-body problem. He considers it as standard because it exemplifies the original version of the problem and is at the same time representative of the principles, aporias and philosophical ideas characterizing the history of the debate to which it gave rise. It is Descartes' formulation, whose origin according to Kim can be traced back to a letter which princess Elizabeth of the Palatinate wrote to Descartes in May 1643:2 "How can the human soul, which is a thinking substance, cause its corporeal spirits to perform voluntary actions?" Through his reply to this question in his Sixth Meditation Descartes inaugurates the philosophical history of this dilemma, and proposes a dualist solution to it: mind and body pertain to ontologically distinct substances whose interaction will later become the problematic aspect calling for an explanation. On this basis Kim goes on to expose briefly the "Cartesian" elements of the question, so as to show how they constitute the standard scheme of the mind-body problem (pp. 72-78). Let me recall them here:

J. Kim, Physicalism or Something Near Enough, Princeton, Oxford 2005, p. 8. For a comprehensive introduction to the origins of the mind-body problem in modern philosophical and scientific thinking see M. Di Francesco, Introduzione alla filosofia della mente, 2 ed., Rome 2002, p. 35-123, and S. Nannini, L'anima e il corpo. Un'introduzione storica alla filosofia della mente, Rome, Bari 2002.

² Elizabeth's letter can be found in R. Descartes, Lettere, ed. by G. Belgioioso et alii, Milan 2005, p. 1744-1747, lett. n. 391.

³ J. Kim, Physicalism or Something Near Enough, p. 73.

(1) There exist two radically distinct kinds of substances: a material or extended one, to which belongs the body, and a non-material non-extended one, to which belongs the mind, or rather the thinking subject. The latter can be called a *mens*, as Descartes does, or a soul, if the soul be construed in this context, as Plato does, as responsible essentially and exclusively for noetic activity.⁴

(2) Given (1), there follows immediately the need to assume the interaction between these two kinds of distinct substances. That such an interaction exists appears to be an unquestionable fact: it constitutes the very essence of each individual which is evidently composed of a body whose mental faculties and thinking activity it seems difficult to call in question.

If we are to take up the challenge that the combination of (1) and (2)⁵ poses, we have inevitably to raise at least two problems.

- (3) The first problem concerns the modes of this interaction, which must account for the causal relationship between mind and extension, i. e. between the mental and the physical, and therefore the way the mental performs a causal action on the physical (and *vice versa*). This is clearly the core of the mind-body problem in its dualist and interactionist version and the main topic in the debate between philosophers of mind. Besides the difficulty of explaining the causal relationship between the mental and the physical, or between mind and extension, there arises the thorny problem of
- 4 S. Broadie, "Soul and Body in Plato and Descartes", in: Proceedings of the Aristotelian Society, 101/2001, p. 295-308, examines the differences between Plato's conception of the soul and Descartes' conception of the mind in their relationship with the body, and focuses in particular on the possibility of separating the two items.
- 5 One can of course refuse to take up this challenge, and defend either (A) the dualist non-interactionist, i. e. occasionalist, view that the two substances, in virtue of their status and operational function, coexist without interacting; or (B) the monist, non-reductionist view (B₁) that accepts a functional dualism according to which the mental does not entirely coincide with the physical, but does not subsist independently of it either (as is the case in some forms of functionalism or in the supervenience theory), or (B₂) the reductionist view that denies any form of substantial dualism and reduces the whole of the mental to the physical and the functional, so that the very mind-body distinction would turn out to be a mere illusion, as would mind itself, mental life, and even the self, if they were construed as autonomous realities absolutely irreducible to the body or any corporeal element. This is the so-called eliminativist view, inaugurated by Churchland and nowadays pugnaciously defended by D. Dennett, *Sweet Dreams. Philosophical Obstacles to a Science of Consciousness*, Cambridge (Ma) 2005.

understanding how the mental or the mind, if they are conceived of as pertaining to a substantial reality different from the spatio-temporal one of physical extension, can perform a causal action whatsoever, for such an action seems to presuppose a spatio-temporal relationship which links the cause to its effect. In other words, the problem concerns not only the way a thinking substance can act on an extended substance, but also, more fundamentally, the way a thinking substance with no extension in space and time can perform a causal action at all.⁶

(4) The second problem concerns the place of this interaction, with the curious and questionable hypothesis of the pineal gland and the marrow which, even if it was due to purely instrumental reasons, has been hotly discussed and has attracted strong criticism.

In this theoretical context, the conclusion seems to be inevitable and rather disappointing:

(5) if, on the basis of (3), the modes of the mind-body interaction turn out to be incomprehensible or if no clear and satisfactory solutions to this problem emerge, and if at the same time, on the basis of (2), the interaction appears to be certain and unquestionable, it has to be accepted as a primitive and necessary element, which however cannot be further explained. In this context the attempt to give a coherent reply to (4) becomes less important. Such a conclusion was the strongest motive that prompted philosophers of mind to develop an alternative to a Descartes-inspired interactionist dualism.

I do not propose here to put this scheme to the test or to discuss it thoroughly in order to assess whether it correctly mirrors Descartes' position, or whether it represents the standard version of the mind-

- 6 This point is thoroughly discussed by J. Kim (see n. 1), p. 78-85.
- A few remarks will be in order here. As the relevant passages of the *Sixth Meditation* and of the *Fourth Answers*, as well as the above mentioned letters to Elizabeth of the Palatinate and to Regius (dating back to the end of January 1642; see R. Descartes (see n. 2), p. 1589, lett. n. 343) make it clear, Descartes considers the dualist view based on the distinction between mind and extension as necessarily true, because it can be the object of a demonstration. He also holds that the *unio substantialis* between the mind and the body is undeniable, since it is attested by an indubitable experience. This *unio substantialis* he sees as a sufficient explanation and foundation for their interaction. However, while it is possible to account for its physiological modalities, its ontological modes are obscure. That is to say, it is impossible and mysterious to think *at the same time* the distinction between "mind" and "extension" and

body problem to which the fundamental aspects of the modern and contemporary debate can be traced back. Rather, I will try to show how, if this version of the mind-body problem is assumed as the standard one, the conscious formulation of the problem must be traced much further back in time and in the history of philosophy, even further back than Aristotle, i. e. the only ancient philosopher whom scholars regularly refer to in this context because of his psychological hylemorphism (which is sometimes, e. g. by Putnam, taken to be pre-functionalist, and in any case anti-dualist and therefore somewhat pre-reductionist). What I intend to suggest is that a clear awareness of the problematic aspects of the soul/mens-body problem can be found as early as Plato, not in an extrinsic and generic way, but in a form that actually bears a contextual and theoretical resemblance to its modern version. For the sake of simplicity I will confine my discussion to a comparatively limited, but nonetheless representative, number of passages taken from two of Plato's dialogues: the *Phaedo*, and particularly the *Timaeus*. A more comprehensive philological and textual scrutiny I leave for another occasion.

The choice of just these dialogues evidently excludes other important texts for a reconstruction of Plato's psychology, i. e. the *Meno*, the *Republic* or the *Phaedrus*. My reason for it is above all that they represent respectively the starting-point and the endpoint of Plato's psychological thinking, if one accepts the standard chronological order of the dialogues. For in them Plato proposes a reconstruction of the various aspects of the relationship between body and soul: from a

their union. This means that the interaction, although Descartes accepts it as an evident and unproblematic matter of fact, does not constitute at all the basis for going beyond the substantial dualism, for the *aliquid unum* of mind and extension that warrants their interaction and the efficacy of their causal relationship does not refer to a single substance either from a conceptual or a functional point of view (interestingly enough, Descartes never uses the word "substance" to indicate the union that he nonetheless describes as "substantial"). As a result, the celebrated Cartesian hypothesis of the pineal gland, while offering a local representation of the interaction between mind and extension, i. e. of the communication between *mens/* soul and body, fails to indicate what the "place" of the soul is, i. e. to assimilate the two substances so as to reduce somehow their discontinuity (I should like to thank Igor Agostini for clarification of some of these points). In what follows I will try to show that Plato's psychology, particularly in the *Timaeus*, hints at some possible solutions of this problem.

8 See E. Berti's rich and illustrative status quaestionis, "Aristotele e il Mind-Body Problem", in: Iride, 23/1998, p. 43-62.

genetic point of view, of its origin; from an ontological point of view, of the diversity of the two substances that determine it; from a causal point of view, of their interaction, whose psycho-physiological details Plato even attempts to clarify. Unlike the *Phaedo* and the *Timaeus*, the *Meno*, the *Republic* and the *Phaedrus* only tackle the problem of the soul from a partial perspective (an epistemological, an ethical-political, and an eschatological one respectively) and do not offer a systematic discussion of its relationship with the body.

I will now go on to examine Plato's texts, on the basis of the standard scheme of the mind-body problem that I have outlined above.

(1) The *Phaedo* and the *Timaeus* assume the existence of a trenchant substantial dualism between soul and body.

I will only quote *Phaed*. 79a-b: "Shall we pose two kinds of reality (δύο εἴδη τῶν ὄντων), a visible and an invisible one (τὸ μὲν ὁρατόν, τὸ δὲ ἀιδές)? – Let us pose them. – And the invisible kind always remains unchanged (ἀεὶ κατὰ ταὐτὰ ἔχον), while the visible kind never does (μηδέποτε κατὰ ταὐτά)? – Let us pose this too". Since each of us is composed of soul and body, it is clear that the body is more similar and akin to the visible kind (δμοιότερον καὶ συγγενέστερον τὸ $σ\tilde{\omega}$ μα ... $τ\tilde{\omega}$ ὁρα $τ\tilde{\omega}$), while the soul is more similar to the invisible kind (ὁμοιότερον ψυχὴ ... τὰ ἀιδεῖ). The conclusion is clear-cut (79c1). Given the substantial distinction between two opposed ambits of reality, a visible and material one, subject to transformation and change, and an invisible one, immaterial and exempt from becoming, it is "absolutely necessary" ($\pi\tilde{\alpha}\sigma\alpha$ $\alpha\nu\alpha\gamma\kappa\eta$) that body and soul find their place in the two opposed ambits. Body and soul too are radically opposed to each other, owing to their nature and their cognitive attitudes. For a few lines further (79c-d) we hear that through the body (διὰ τοῦ

9 In some recent articles I discussed the mind-body problem with reference to the dialogues that I leave out of my account here. See "Anima e corpo: immortalità, organicismo e psico-fisiologia nel Timeo platonico", in: Les études platoniciennes, 2/2006, p. 141-154; "Che effetto fa essere un pipistrello? Il Mind-body problem nel Timeo platonico", in: M. Migliori, L. Napolitano, A. Fermani (eds.), Interiorità e Anima. La psychè in Platone, Milano 2007, p. 89-108; "La concezione dell'anima nella Repubblica di Platone", in: Giornale critico della filosofia italiana, 89/2010, p. 517-552; and "Plato's Psychology in Republic IV and X: How Many Parts of the Soul?", in: N. Notomi, L. Brisson (eds.), Plato's Republic. Selected Papers from the Ninth Symposium Platonicum, Sankt Augustin 2013, p. 188-199, where all the relevant bibliographical references can be found.

σώματος) we acquire sensible knowledge, i. e. knowledge of an uncertain and ever-changing kind, while the soul, when it acts by itself and has no connection with the body ($\alpha \dot{\nu} \tau \dot{n} \kappa \alpha \theta$) $\alpha \dot{\nu} \tau \dot{n} \nu$), is the source of a true, eternal and immutable knowledge of those true, eternal and immutable objects to which it is akin (συγγενής), as is once again made clear. As for the *Timaeus*, one has only to recall what is stated at 30a-b. The most beautiful and accomplished living being is the one which is capable of thinking, and this is why the demiurge "put mind into soul, and soul into body (νοῦν ἐν ψυχῆ, ψυχὴν ἐν σώματι), and thus framed the universe, so as to accomplish a work that might be by nature as beautiful and good as possible". A few pages further (41c), in his speech to the minor gods who helped him fashion living beings, the demiurge orders them to compose mortal beings. The gods produce their material bodies (42e-43a), while their divine principle, i. e. their immortal soul, is produced separately by the demiurge himself and then entrusted to the minor gods in order that they complete their task (ὅσον αὐτῶν ἀθανάτοις ὁμώνυμον ... θεῖον λεγόμενον ἡγεμονοῦν ἐν αὐτοῖς ... ἐγὼ παραδώσω). The demiurge orders them to "frame the rest" (τὸ δὲ λοιπὸν ὑμεῖς ... ἀπεργάζεσθε), i. e. the mortal body, since the difference between himself, the supreme god, and the minor gods, his helpers, must correspond to an analogous difference of status and properties between the soul, the only real immortal principle of living beings, and their mortal body.

In both dialogues therefore the ontological difference between soul and body as distinct substantial and functional realities appears to be well attested. No doubt or hesitation in this connection seem to arise in Plato's thinking.

(2) We can now move on to the question of the interaction between soul and body, which is also taken to be so evident that a few cursory references will suffice.

In the *Phaedo* Plato explains (64c) that death is nothing else than the "separation of the soul from the body" (τὴν τῆς ψυχῆς ἀπὸ τοῦ σώματος ἀπαλλαγήν), i. e. the condition in which the body remains in itself, separated from the soul (χωρὶς ἀπὸ τῆς ψυχῆς αὐτὸ καθ' αύτὸ τὸ σῶμα), and the soul subsists in itself, separated from the body (χωρὶς τὴν ψυχὴν ἀπὸ τοῦ σώματος αὐτὴν καθ' αὐτήν). It follows (66b) that life consists in the "mixture" of soul and body (ἕως τὸ σῶμα ἔχωμεν καὶ συμπεφυρμένη ἢ ἡμῶν ἡ ψυχή), for the soul is united with the body (μετὰ τοῦ σώματος) and only after death will it at last

be by itself and break free from the body, but not before (τότε αὐτὴ καθ' αύτὴν ἡ ψυχὴ χωρὶς τοῦ σώματος, πρότερον δ' οὔ). While the soul is alive, it is "absolutely necessary" (πᾶσα ἀνάγκη) for it to have some connection, however slight, with the body, whose reasons and temporal limits only god knows (66e-67a). The *Timaeus* does not call any of this into question. Firstly (34c), since the soul has to govern the body (ψυχὴν σώματος ὡς δεσπότιν καὶ ἄοξουσαν), it has to be united with it (συνέοξας). This union implies a contact (36e), since the centre of the soul is made to coincide with the centre of the body (μέσον μέση συναγαγών). It is precisely because of this necessity that the demiurge in the above-mentioned speech to his helpers (41d) orders them to produce mortal beings, "weaving together the mortal and the immortal" ($\dot{\alpha}\theta\alpha\nu\dot{\alpha}\tau\omega$ $\theta\eta\nu\dot{\tau}\dot{o}\nu$ π 0000 $\psi\alpha$ 100 $\nu\dot{\tau}\varepsilon$ 2), i. e. the soul that they received from the demiurge and the body which they themselves have built. The conclusion is as follows (42a): "the souls are of necessity implanted in bodies" (σώμασιν ἐμφυτευθεῖεν ἐξ ἀνάγκης [scil. αί ψυχαί]).

From the combination of (1) and (2) there arise the two "Cartesian" problems concerning (3) the possibility and the modes of the soul-body interaction and (4) the "place" of this interaction.

(3) As I said above, the problem of the possibility and the modes of the soul-body interaction is a twofold one. Firstly, one must account for (3a) the soul's role as an active cause, i. e. understand how it can interact with something else, since it belongs to a substantial dimension which is different from the sensible and spatio-temporal one where ordinary causal relationships take place. As a result, one must also explain (3b) how the soul can play the specific role of an active cause in the body whose soul it is, i. e. how it can interact with *its* body.

As for the first point (3a), the *Phaedo* takes a somewhat general, or rather generic, course. The soul possesses a certain faculty to govern the body because of its divine nature (see e. g. 80a): "nature orders the soul to govern and command" (ή φύσις προστάττει ... ἄρχειν καὶ δεσπόζειν), and therefore "the soul resembles the divine" (ή ψυχὴ ἔοικεν ... τῷ θείῳ). Although Plato here apparently describes the soul as foreign to the sensible, the soul seems indeed to be characterized by a twofold nature. For on the one hand, it is able to perform a function in the sensible world in that it uses the body (τῷ σώματι προσχρῆται). On the other hand, its real nature is a state of autonomy and independence from all that is other than itself, when it "gathers itself…

and stops wandering" (αὐτὴ καθ᾽ αὐτὴν γένηται ... πέπαυταί τε τοῦ πλάνου), subsisting in its absolute purity (79c-d). As for the second point (3b), the *Phaedo* only states (67a) that there exists an absolute necessity which in some mysterious way has received the task to regulate the connection of the soul to the body and its relationship with it. In any case, this relationship must be as distant as possible (ὅτι μάλιστα μηδὲν ὁμιλῶμεν τῷ σώματι μηδὲ κοινωνῶμεν ὅτι μὴ πᾶσα ἀνάγκη).

On both these points the *Timaeus* appears to be much more explicit and Plato seems to go further. First of all, (3a) the question as to how the soul can at all perform a causal action in the sensible spatio-temporal dimension is answered in the *Timaeus* pages where the framing of the world soul by the demiurge is described (34a-36d).¹⁰

To put it briefly, the whole sensible universe is a living being composed of body and soul, just like every individual living being (but on a larger scale and to a greater degree of purity). Its body is a material compound whose structure is defined by strict mathematical proportions (31b-32c). The world-soul is produced from a mixture of being, sameness and difference, but not of the intelligible ideas of being, sameness and difference, nor of their corresponding sensible properties, but of a mixture of both. In this exclusively negative way Timaeus illustrates the intermediate nature of the world-soul and its middle place in the hierarchy of reality. There is nothing accidental in the mixture of being, sameness and difference out of which the demiurge produces the world-soul, as it follows a precise mathematical order, establishing rigorous numerical proportions for the combination of the three elements. Once this mixture has been achieved, the demiurge divides this material into two equal strips, which he first lays out in the form of a X, and then bends to bring together the extremities of the two strips. Thus he obtains two concentric circles, one tilted in relation

¹⁰ I am tacitly assuming that the constitution of the world-soul, which is produced by the demiurge in order to animate the whole universe, is wholly analogous to that of the individual souls, since the dialogue explicitly says (41d) that the latter are produced in the same way and out of the same, if less pure, material. I also assume that the description of the generation of the soul by the demiurge is a consequence of the narrative structure and the mythological character of the *Timaeus*. However, if we leave this aspect aside, we have to admit that as an immortal reality the soul cannot be generated. This description must then be viewed as concerning not the *generation* proper, but the *composition* of the soul. See my introduction to Platone, *Timeo*, ed. by F. Fronterotta, 3 ed., Milan 2011, p. 77-82.

to the other, like the equator in relation to the ecliptic, intersecting at two opposite points. The first, the circle of the same, rotates outside the other, the circle of the different (34a-36b, see fig. 1); the movement of the circle of the same is perfectly regular and uniform, single and undivided, while that of the circle of the different, though regular and uniform, is divided six times, creating seven circular, concentric trajectories, each characterised by different movements (36d; see fig. 2). It is fairly clear that the mixture of which the soul is composed, as well as the mathematical structure of its disposition – which gives a concrete, numerical and geometrical form to the essential order of the ideas – hint precisely at the necessity that the soul be at the same time a sensible and an intelligible substance. Thus it can have a place halfway between the sensible, which it has to animate, and the intelligible, to which it is akin because of its eternal and immortal nature and on which it has to model itself in order to perform its rational and causal action. The causal activity of the soul - which has the status of an eternal and purely rational substance but is immersed in the sensible spatio-temporal dimension in order to accomplish its animating function – is therefore a consequence of the very mixed nature of its composition. In other words, the soul can cause certain spatio-temporal effects while remaining an incorporeal, eternal and immortal substance, for it is not wholly foreign to the sensible reality subject to becoming in space and time, which is an ingredient of its very composition and structure.11

11 Questionable as it is, I consider Plato's solution to the problem of the soul's causal action as proof of the fact that he was acutely aware of this issue. However, two objections can be raised against Plato's argument. If the soul, in virtue of its composition, is a mixture of sensible and intelligible essence, can it really be considered different from the material body and its sensible nature? That is to say: does the view that one of the two substances at issue is a melange which somehow contains elements pertaining to the other represent an authentic substantial dualism? However one answers such questions, it is fairly clear that in Plato's view the mixed composition of the soul does not reduce its otherness from the body. This otherness, as Plato repeatedly remarks, is radical in all respects. A more serious objection concerns the structure of the soul. Does not the view that the soul is a mixture of the sensible and the intelligible amount to transferring the ontological difficulty of the substantial dualism to the psychological sphere of the composition of the soul? In other words, this view apparently transfers the problem of the mind-body interaction within the soul, which is seen as reproducing in itself and its essence a delicate relationship between the sensible and the intelligible. Although this objection is certainly serious, Plato seems to take no account of it.

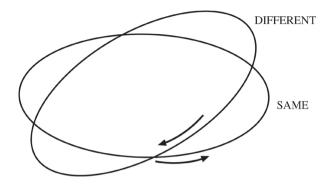


Fig. 1

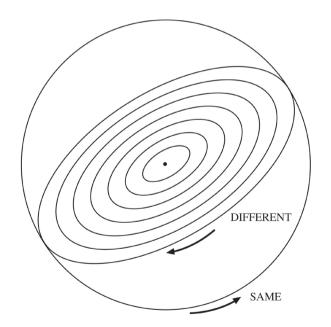


Fig. 2

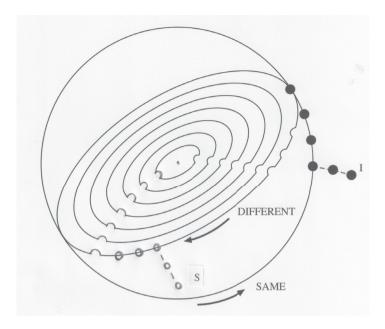


Fig. 3. I = Intelligible, S= Sensible

The mixed constitution of the soul also provides a solution to the more specific problem (3b) concerning the modes in which it exercises its causality in the body that it animates and with which it interacts. We must turn here to the *Timaeus* pages where the functions pertaining to the world soul are illustrated (36e-37c). The demiurge equips it with a moving function from which a cognitive function also derives: first, by virtue of the circular movements of its two circles, the world-soul impresses and maintains the regular movement of the heavenly bodies, but also the movement of the earthly bodies, which is an irregular movement that can nevertheless be assimilated to the movements of the world-soul, insofar as the geometrical-mathematical structure characterising the world-soul corresponds, in gradually descending degrees, to that pertaining to all bodies, heavenly and earthly, that have a soul and a body. Secondly, as a soul not only lives and moves, but is

¹² This point is well illustrated by G. Vlastos, *Plato's Universe*, 2 ed., Las Vegas 2005, p. 50-54.

also intelligent and has cognitive attitudes – insofar as intelligence and knowledge consist in a series of movements produced or received 13 -. cognitive attitudes depend on the moving capacity of the world-soul. When knowledge is achieved through the movement of the circle of the same, the world-soul has true knowledge of the intelligible objects which the circle of the same is closely related to or that it properly "touches" (ἐφάπτηται), so producing intellection and science (νοῦς $\vec{\epsilon}\pi \iota \sigma \tau \dot{\eta} u \eta \tau \epsilon$); but when knowledge is achieved through the movement of the circle of the different, the world-soul only has (true) opinions. and perceives the sensible objects which the circle of the different is always turned to and closely related to (37a-c). This cognitive mechanism of the world-soul probably extends to the individual, embodied souls;14 and it also helps to explain how the world-soul can act on the body that it animates and why in the world-body this causal action acquires the character of a geometrical-mathematical disposition. This is the question we have to start with: what happens when the worldsoul "touches" an object of knowledge, be it an intelligible object (that it touches through the circle of the same, and of which it realizes an intellection) or a sensible one (that it touches through the circle of the different, and of which it forms an opinion)?¹⁵ Although this contact is not sensible or material, and therefore is in some sense metaphorical, it has to be sufficiently real to produce what we call knowledge, which is an affection of the soul, a passion, and so, in some sense, a modifica-

- 13 See e. g. Resp. I 353d; Soph. 248b-e; Leg. X 896e-897a.
- 14 There are of course some significant differences between individual souls and the world-soul. They concern their respective degrees of purity and the nature of their respective bodies: eternal and imperishable in the case of the world-soul, mortal and perishable in the case of individual souls. I will not go into these details here. Let me refer to my articles "Il *Timeo* e la matematica *embodied"*, in: L. Napolitano (ed.), *La sapienza di Timeo*, Milan 2007, p. 173-206, part. 190-191 and n. 28, and "Intelligible Forms, Mathematics, and the Soul's Circles: An Interpretation of *Tim*. 37a-c", in: *Les études Platoniciennes*, 4/2007, p. 119-127, part. 121, n. 5.
- 15 As is evident, in the case of intelligible objects the "contact" with the circle of sameness is immediate, since it concerns immaterial realities whose relationship is not hindered by the presence of matter this holds for the world-soul as well as for individual souls. On the other hand, in the case of sensible objects this "contact" is seen as concerning the circle of the different and the sense perceptions that come from the sense organs "touching" directly the sensible objects, and are gradually transmitted through the body until they reach the soul, i. e. its circle of otherness. While this is surely the case for individual souls, it is far from clear how sensible knowledge can pertain to the world-soul, for its body, i. e. the whole of the universe, does not seem to possess sense organs.

tion of it.¹⁶ But, keeping to the model illustrated in the *Timaeus*, the circle of the same consists of a circular trajectory that, by virtue of its uniform rotation, moves the circle of the different and, through it, the other six concentric circles that it governs. The transmission of this movement too is naturally by contact, since the circle of the same and the circle of the different were laid out by the demiurge in two strips overlapping at one point, and then folded in the form of a X, bringing their extremities together. They therefore intersect at two points, and it is obviously through these two points of intersection that the transmission of movement takes place (see fig. 1). Later, the circle of the different, whose circular movement embraces and accompanies that of the six concentric circles that it includes beneath itself, transmits to them in turn this movement, which then propagates itself, gradually declining through the inferior and inner circles, until it reaches the centre of the soul (see fig. 2), which is united at the centre of the world-body; and that is how the movement of the soul, starting from the perfectly regular and uniform movement of the circle of the same, gradually descends, multiplying and diversifying itself, finally reaches the body and can thus actually animate it.¹⁷ But what is actually transmitted in this transmission belt? Certainly movement, in the ways we have just illustrated, but not only that. When the circle of the same or the circle of the different "touch" an object of knowledge, they sustain its contact, which leaves an imprint in them of the object that has been

- 16 Although the actions and passions, the contacts and deformations produced by a contact are most naturally to be comprised among sensible and material objects, one must suppose that the same processes can take place among such immaterial realities as the soul and the objects that it cognizes. In this case too there must be a contact between the soul and the object that the soul "touched", which leaves in it an imprint corresponding to the cognized form, i. e. a psychic trace that remains in the soul and provides the base for cognition. See for example *Phaed*. 79d, where φρόνησις is defined as a πάθημα of the soul that turns to what is "pure, eternal, immortal and unchanging" and "always remains unchanging with respect to its objects, for such are the objects that it touches". Plato frequently uses verbs referring to an actual contact between the soul and its objects in the context of intelligible knowledge: cf. e. g. Symp. 212a4; Phaed. 65b9, 79c8, d6; and more generally the last pages of book VI of the Republic, particularly 511b-e, within the "noetic" segment of the theory of the divided line. As is well known, Aristotle in De anima III 4, 429a10-20, and 5, 430a10-20, draws a parallel between "thinking" and "perceiving", according to which "thinking" amounts to the intellect's "receiving" the action of the intelligible.
- 17 On the progression and the propagation of this movement see also Leg. X 893c-d and 894c.

"touched", and are thus modified by it. The circle of the same or the circle of the different thus continue on their perfectly regular and uniform trajectory, but the point where they have "struck" their object is modified by the form that the object has impressed on it: it is certainly not a figure in the strict sense, because there is no material, in the strict sense, that can receive its features, but, as the circle of the same and the circle of the different, like the whole soul, have a geometrical-mathematical structure, the modification produced by contact with the object will appear as a geometrical-mathematical modification, supposing, for example, that the circumference of the circle of the same or of the circle of the different is subject to a numerical variation or a quantitative oscillation of the elements that make it up at the point in which the contact with the object took place. Now, continuing in their rotation, the circle of the same and the circle of the different intersect each other at two given points, in each of which, in the course of the rotation, it will pass on the modification undergone by them as a result of their contact with the object "touched". It is not difficult to imagine what follows in this process of transmission through the concentric circles marked inside the circle of the different, and then, by virtue of the contact between the world-soul and the world-body, in the world-body. It is an extension or radiation of a trajectory and a movement, but also of the modification of this trajectory which has the form of a numerical variation or quantitative oscillation that, impressed on a sensible material (31b-32c), i. e. on the world-body, appears as a concrete and visible form, deriving from a particular distribution of the geometrical elements that make up the body of all things and from their consequent spatial arrangement (cf. fig. 3).

As far as I can see, nothing prevents the same mathematical model from explaining, at the level of the individual embodied soul, how each soul directs its body, functioning in turn as a transmission belt (A) of the intelligible order, through its circle of the same which entails the proper functioning of the body, but also (B) of sensible disorder, through its circle of the different which entails the malfunctioning of the body. Naturally, as it is in this case an individual embodied soul, the strongest and most immediate cognitive signal reaches it now through and from the body so that, being in touch with external sensible reality, the body is affected through one of the five senses, which undergoes a physical deformation, whose effects are transmitted to the soul, finally touching its circle of the different. Dealing with signals coming from sensible objects that are changeable and unstable, the

circle of the different that is affected by them will suffer repercussions and deviations of its movement, thus disturbing or even upsetting the whole soul, and through it, the body of which it is the soul, overturning its natural equilibrium. But when the individual soul is turned to knowledge of the intelligible (41c-d, 44b, 47a-c etc.), then a virtuous mechanism analogous to that previously described for the world-soul is set off: the non-sensible impressions left by contact with intelligible objects on the circle of the same, transmitted to the circle of the different, and so to the lower orders of the soul and then to the body, impress on the whole psycho-physical organism a regular movement and an orderly disposition that re-establish the equilibrium of the whole. This complex mechanism offers a detailed account of the modes of interaction between the soul and the body (of the whole universe as well as of individual souls). Although they are two different substances that pertain to distinct ontological realms, the soul and the body can communicate with each other because they share a common property, i. e. movement, and a common substantial scheme, i. e. their common geometrical and mathematical structure, which can decode the causal actions performed at a psychical level by the soul, in the form of cognitive acts, and transform them in physical dispositions that take place at the material level of the body.

(4) If we now move on to the problem of the physical or physiological "place" of the soul-body interaction, of which the *Phaedo* bears no trace, the *Timaeus* offers a clear solution. Given the mechanism which we have outlined above, this interaction involves and concerns the whole body, not one of its particular organs, since the body is penetrated by the soul in its entirety, and each of its regions is reached by the propagation of its movements. What Plato adds to this picture is a material and corporeal substance so thin as to be particularly receptive of the soul's stimuli, i. e. the marrow, which has the task of transmitting the psychic impulses to the body (73b-d).¹⁸

Once (3) and (4) have been answered through the account of the possibility of the causal action of the soul and the illustration of the

¹⁸ On the physiological aspects of the soul-body interaction, particularly in the late antique debate – that derives in part from the *Timaeus* –, and with special emphasis on medicine, see R. Sorabji, "The Mind-Body Relation in the Wake of Plato's *Timaeus*", in: G. J. Reydams-Schils (ed.), *Plato's* Timaeus as *Cultural Icon*, Notre Dame 2002, p. 152-162.

modes of the causal action in the body that it animates, it becomes possible to raise the issue of the nature of the soul-body interaction, i. e. the product of this interaction: the individual that arises from the union of soul and body. The minimum requirement of any possible solution of the mind-body problem, in its standard version which I took as my starting-point, is the ability to explain not only what the nature and the status of the mental and the physical as well as the modes of their interaction are, but also and above all to account for the nature and the status of their union, i. e. the living individual as such or, in other words, the conscious and integrated self that every living individual constitutes.

As I said, the *Phaedo* appears to consider the union of soul and body as a provisional datum which cannot be further understood or explained. On the other hand, the *Timaeus* once again goes well beyond this conclusion, raising the problem of the origin of the soul-body relationship and taking as a starting-point the constitution of the individual soul.

- (5) The individual soul is the product of the union of a rational and immortal principle, akin to the world-soul and produced by the demiurge (41c-d), and of a mortal principle (εἴδος or γένος), in which a passionate or irascible (θυμός) and a desiring or appetitive (ἐπιθυμητικόν) functions are to be distinguished, whose origin and nature seem to be far less clear. The tripartition or more precisely the "tri-functionality" of the Platonic soul is a well-known and accepted fact, at least from the *Republic* onward, so much so that it requires no further illustration. ¹⁹ It is just on the genesis of this compound that the *Timaeus* provides some extra information. In 41a-d the demiurge speaks to his helpers, the minor gods, and orders them to complete the production of the
- 19 I tried to clarify this point in the following articles: "Anima e corpo: immortalità, organicismo e psico-fisiologia nel *Timeo* platonico", p. 141-143 and 146-152, and particularly, with respect to the *Republic* and with ample bibliographical references, "La concezione dell'anima nella *Repubblica* di Platone", and "Plato's Psychology in *Republic* IV and X: How Many Parts of the Soul?" (see n. 9). For some acute remarks on the functional tripartition of the soul, especially from the viewpoint of the role of "intermediary" which the soul has to play in order to establish a relationship between the intelligible and the sensible realm, on the cosmological as well as the psychological level, see T. Buchheim, "Plato's *phaulon skemma*: On the Multifariousness of the Human Soul", in: R. A. H. King (ed.), *Common to Body and Soul*, Berlin, New York 2006, p. 103-120.

kinds of living beings that are to inhabit the world – above all mankind. He goes on to entrust them the immortal principle (ἀθανάτοις ομώνυμον ... θεῖον λενόμενον ἡνεμονοῦν) that will constitute the soul, which he himself produced out of the same elements, albeit less pure, he had used to compose the world-soul. The gods' task will be to "weave together the mortal and the immortal" (ἀθανάτω θηντὸν ποοσυφαίνοντες). Up to now no mention has been made of a distinction between different species or functions of the soul; we only hear of what is composed and dissoluble ($\tau \delta \delta \epsilon \theta \epsilon v \pi \tilde{\alpha} v \lambda \nu \tau \delta v$), i. e. the body, and of the immortal and divine principle, i. e. the rational soul. Therefore the "weaving together" of mortal and immortal that the demiurge's helpers have to bring about probably refers to the union of immortal soul and mortal body. The demiurge goes on to sow in the stars and planets the immortal souls he has produced, and then has them take a panoramic tour of the universe, while he explains them the laws of destiny. The first of these concerns the "first generation" (41de): when the immortal soul is implanted (ἐμφυτευθεῖεν) in the mortal body, there arise violent affections (βιαίων παθημάτων), sensations (αἴσθησιν), i. e. desires mixed with pleasure and pain (ἡδονῆ καὶ λύπη μεμειγμένον ἔοωτα), then fear, anger and all accompanying passions (φόβον καὶ θυμὸν ὅσα τε ἑπόμενα αὐτοῖς, 42a-b). If the rational soul does indeed experience these $\pi\alpha\theta\eta\mu\alpha\tau\alpha$ when it enters the body, this is because it comes into contact with material reality and thus shares its quantitative alterations (the body is material, therefore it can grow bigger or smaller, increase or decrease, i. e. add or subtract itself to the soul). These corporeal quantitative alterations produce qualitative παθήματα, i. e. reactions that can be called psycho-physiological insofar as they are felt in the soul, although they take place in the body and through it (they are transmitted to the soul according to the above scheme (3b) in the form of movements that spread up to the circles of the soul certain numerical variations or quantitative oscillations of its components.) All these reactions belong to the sphere of corporeal sensation and perception and can be divided into two general categories, i. e. desires and passions, that fall under two pairs of opposites, "pleasure-pain" and "fear-anger". I therefore suggest that these two pairs of opposites, along with the general categories of $\pi\alpha\theta\eta\mu\alpha\tau\alpha$ to which they refer, correspond to the two mortal functions of the human soul, the irascible ($\theta v u \dot{\phi} c$) and the desiring or appetitive ($\dot{\epsilon} \pi \iota \theta v u \eta \tau \iota \kappa \dot{\phi} v$). On this interpretation, the mortal functions of the human soul turn out to be the $\pi\alpha\theta\eta\mu\alpha\tau\alpha$ arising in the human organism as psycho-

physiological reactions to the implantation of the immortal soul in the mortal body. In the same way, in 42c-d the soul is said to be able to free itself from the cycle of successive reincarnations only if it can reestablish the immortal principle to its role of absolute preeminence, bringing back the soul's circles to harmony and balance by reasoning (λόγω) and controlling (κρατήσας) "the big mass ... turbulent and irrational" (τὸν πολὺν ὄχλον ... θορυβώδη καὶ ἄλογον), "made of fire, water, air and earth" that has gradually grown about it. Here Plato refers once again. I take it, to the mortal species of the soul, which are irrational, passionate and above all have a material nature (and for this reason are "made of fire, water, air and earth"), since they come about as corporeal reactions to the implantation of the soul. This is why the ultimate liberation of the immortal soul from the body consists in its going back to its original disposition ($\tau \tilde{\eta} \lesssim \pi \rho \omega \tau \eta \lesssim \dots \epsilon \tilde{l} \delta \rho \lesssim \xi \xi \varepsilon \omega \zeta$), in which the immortal principle subdues and covers through the λόγος the whole of the θορυβώδη καὶ ἄλογον ("turbulent and irrational") sphere, thus remaining pure and alone, in itself and by itself.

A few lines further (42d-e) the demiurge orders his helpers to "fashion mortal bodies, that is all that remained and still had to be added to the human soul".20 This means that the minor gods do not have to "add" something else after constituting the bodies (e. g., the mortal functions of the soul), since this addition is simply the mortal body itself. On my interpretation and translation, the demiurge's helpers will only have to fashion the mortal bodies, i. e. what had not been produced by the demiurge himself and therefore had to be added to the immortal soul in order to complete the human living being. That the work of the demiurge's helpers in these lines of the dialogue only concerns the body, is confirmed by the fact that the union which they have to bring about, the only one mentioned here (in 41d and 42a), is that between the immortal soul and the mortal body. No mention is made, on the other hand, of a union, or a synthesis, or whatever one might want to call it, between an immortal principle and a mortal species of the soul. As is once again made clear in 42e-43a, after the demiurge's helpers have produced the body as the seat of the immortal soul and

²⁰ σώματα πλάττειν θηντά, τό τ' ἐπίλοιπον, ὅσον ἔτι ἦν ψυχῆς ἀνθοωπίνης δέον προσγενέσθαι. I construe τε as epexegetic and interpret προσγίγνομαι as describing the addition of something to something else or the assemblage of different parts. Therefore τὸ τ' ἐπίλοιπον does not refer to an addition besides the σώματα θνητά, but is a mere qualification or clarification.

the soul has been implanted in it, there arise from the body violent reactions that reach the soul, flowing and ebbing tides of nourishment and in general sensible $\pi\alpha\theta$ nu $\alpha\tau\alpha$ that disrupt the balance and the disposition of the soul (43b-c; once again reference is here made to the sphere of the lowest desires, i. e. the nutritive ones, and to the whole of tumultuous passions). As is immediately added (43d-e), these flowing and ebbing tides do not shatter the perfect mathematical structure of the soul, since it has been produced by the demiurge, and therefore cannot be broken (it follows that what is at issue here is only the immortal principle of the soul produced by the demiurge); however they do manage to alter and bend it in every direction. This is why in 44a-b the soul is described as avous, i. e. devoid of vous, "as soon as it is bound in a mortal body" (ὅταν εἰς σῶμα ἐνδεθῆ θηντόν). This being so, the only "irrational" soul, i. e. the only soul devoid of νοῦς, arises in the body as soon as the immortal principle is implanted in it, and thus coincides with the reaction that the body experiences when it undergoes the implantation. Finally, as is once again stated (44b-c), the νοῦς can regain its leading role only if such a tumult is brought back to the rational rule of the circles of the immortal soul (through a regular nutrition, an adequate education, and above all through philosophical knowledge, which plays a key role in "re-modeling" the balance of the individual soul on that of the world-soul). If all this fails to happen, the individual risks corrupting the immortal soul and forcing it to wander devoid of mind after the death of the body.²¹

21 Two more passages are relevant to our discussion. In 69c-d Plato describes how the demiurge's helpers carry out the order he gave them, i. e. to produce mortal living beings. After receiving the immortal principle of the soul (ἀρχὴν ψυχῆς ἀθάνατον), they fashion the body around it (i. e. around the head only, which receives the rest of the body as an instrument) and in this, ἐν αὐτῷ, προςωκοδόμουν an ἄλλο εἶδος ψυχῆς, τὸ θνητόν. The mortal species of the soul is "added" or "placed beside" the ἀρχὴν ἀθάνατον, since the verb προσοικοδομέω refers to the activity of the οἰκοδόμος, i. e. of the architect who projects, plans and disposes, rather than to that of the workman who produces, builds or even creates. This είδος θνητόν is δεινά καὶ ἀναγκαῖα ἐν ἑαυτῷ παθήματα ἔχον, and its irresistible παθήματα consist first of all in pleasure and pain, then in temerity, fear and anger, i. e. once again in a desiring and an irascible sphere. From this mixture arises τὸ θνητὸν γένος, i. e. here, at last, mankind. In this passage the mortal species of the soul are for the first time distinguished and spoken of in the plural, i. e. divided into a higher species, anger, which is located in the chest, and a lower one, desire, which is located in the entrails and the liver (69e-71d). Finally, in 73b-d, the constitution of the bones and flesh is described: they derive from the marrow, in which "the bonds of life" are made fast that bind the soul to the body (τοῦ βίου δεσμοί, τῆς ψυχῆς τῷ σώματι

As this discussion of the relevant passages seems to me to show pretty clearly, the *Timaeus* sees the whole mortal and irrational sphere of the soul as a set of psycho-physiological reactions that arise in the body (and are immediately transmitted to the soul) when the immortal soul is implanted in it.²² This means that according to the psychology exposed in the *Timaeus* there is only one really autonomous soul, which is separate and subsists in itself, and therefore turns out to be immortal and to be added to the body as a substance distinct from it. According to the myth, the human soul appears to be produced by the demiurge as an image of the world-soul and out of the same material, which is gradually divided into portions. Each of these portions is then sowed in a different star and planet. These celestial souls are then implanted in mortal bodies, which they guide. After the death of the body, they finally go back to their star, where they are received by the demiurge's helpers (41d) and can forever devote themselves to their celestial activity, i. e. the exercise of vouc. Thus they will lead a βίον εὐδαίμονα in accord with their ἕξις, which is characterized by immortality, divinity and rationality (42b).²³ The immortal souls, these

- συνδουμένης, ἐν τούτφ διαδούμενοι). The three species of soul are here taken for granted (73b), and are said to correspond to and inhere in different species of marrow which are characterized by different degrees of purity. No reference is made here to parts of the soul; rather, we hear of its locations (the only parts in question are those of the marrow, which receive the different species of the soul). Nor are the species ever said to be produced, since their existence is taken for granted. What needs to be explained, is how they can spread in the body and interact with it through the marrow, that ancient ancestor of the pineal gland.
- 22 My interpretation, which I worked out and clarified in some detail in the abovementioned articles (see n. 9), identifies the generation of the lower and mortal functions of the individual soul with the psycho-physiological reactions that arise in the body when the rational and immortal soul is implanted in it. This amounts to denying that the individual and composite soul possesses any kind of substantial autonomy, and therefore to countering the more traditional view that strictly speaking the lower functions of the individual soul are also "produced" (by the demiurge's helpers) as independent and self-subsisting, albeit clearly mortal, "parts". See e. g. A. E. Taylor, A Commentary on Plato's Timaeus, Oxford 1928, ad loc., F. M. Cornford, Plato's Cosmology. The Timaeus of Plato translated with a running commentary, London 1937, particularly p. 146-150, 281-286, 291-294, and L. Brisson, Le même et l'autre dans la structure ontologique du Timée de Platon, 3 ed., Sankt Augustin 1995, p. 416-420.
- 23 I am thinking here of that final liberation from the body which the soul can attain after completing the cycle of its "rebirths". What happens after this final liberation is unclear and still a much debated issue. Some scholars think that the soul just dissolves. For others, it can at last devote itself exclusively to rational activity, while

eternal rational substances forcefully implanted in the bodies, will thus regain their previous nature, that of celestial intellects, all akin to one another in virtue of their origin (i. e. the same material as the world-soul is made of), their temporary function (i. e. the animation of a body) and their immortal destiny (i. e. the rational exercise of intellect).

Upon the death of the body (i. e. the separation of the immortal soul from it), the mortal species of the human soul, as mere *functions* of the body in its interaction with the immortal soul, will inevitably die and dissolve. This is no surprise at all, since Plato makes it quite clear more than once (69c-e, 70e).

I will not go into the consequences that all this entails for a more general interpretation of Plato's psychology, with respect to the alleged development of his philosophy in the dialogues and to its relationship with Aristotle's psychology. Nor will I discuss the eschatological implications of this reading for the doctrine of the immortality of the soul, once it is made clear that the dissolution of the union between the body and the soul discontinues all those mortal functions of the soul that pertain to the construction of personal individuality and of the "self". 24 Plato evidently considers the "self" of an individual as the synthesis of the immortal and rational soul with a mortal body, i. e. he sees it in a strictly dualist and interactionist perspective: there exist two substances, the soul and the body, and each is capable of exercising an open and reciprocal causality. The genesis, the nature and the mode of functioning of this synthesis are also described. The admirable psycho-physiological balance resulting from all this, i. e. the individual "self", is clearly "temporary" and always unique and irreplaceable, since it derives from the supervenience²⁵ – to borrow a word from cog-

some hold the view that the liberation is once again temporary, for after a period of "rest" the soul will have to undergo another cycle of "rebirths" in the bodies. W. Deuse, *Untersuchungen zur mittelplatonischen und neuplatonischen Seelenlehre*, Mainz, Wiesbaden 1983, examines the problem in some detail and offers a reconstruction of the debate and the different views that were put forward in the Middleplatonic and Neoplatonic tradition.

- 24 For these issues I refer once again to my "Che effetto fa essere un pipistrello? Il *Mind-body problem* nel *Timeo* platonico" (see n. 9), p. 99-108. See also B. Centrone, "L'immortalità personale: un'altra nobile menzogna?", in: M. Migliori, L. Napolitano, A. Fermani (eds.), *Interiorità e Anima. La psychè in Platone*, Milano 2007, p. 35-50.
- 25 This notion, which plays an important role in some contemporary anti-reductionist theories, is well clarified by D. Davidson (ed.), Essays on Actions and Events, Ox-

nitive science – of a soul whose complex structure arises from a material body reacting to the implantation of an immortal principle, and therefore disappears upon the death of that material body. For even if every immortal principle were perfectly identical to the others and were implanted in portions of matter identical to one another, the specific psycho-physiological reaction which supervenes would certainly turn out to be in each case different. It would assume the form of the lower functions of the soul that provide the *medium* between the immortal principle and the mortal body, i. e. the psychic and physical space where the immortal, eternal and immaterial principle communicates with the mortal, changing and material body. In other words, the Platonic soul with the whole of its functions, which we can consider – cognitively speaking – as the self emerging in the subjective conscience, is an incorporeal reality that necessarily arises upon the interaction between the immortal principle and the mortal body. This is so because the immortal principle, when implanted in the mortal body, cannot remain pure and fail to mix with the body, but must necessarily interact with the body that completes it. On this interpretation of the psycho-physiology of the Timaeus, the human soul with the whole of its functions is always immersed in the body, and its composition, structure, and operational capacity are inextricably linked to the body and to its relationship with it, and therefore from the beginning to the end of this relationship, i. e. from the birth until the death of the bodv.26

Given the above analysis, I believe we can accept the initial hypothesis as to the Platonic origin of the mind-body problem in what I assumed, on the basis of Jaewong Kim's scheme, to be its standard version. I should even suggest that Plato actually goes well beyond Descartes' formulation of the problem (or what Kim considers as such).

ford 1980: "Mental characteristics are in some sense dependent, or supervenient, on physical characteristics. Such supervenience might be taken to mean that there cannot be two events alike in all physical respects but differing in some mental respect, or that an object cannot alter in some mental respect without altering in some physical respect".

26 On Plato's concept of the soul as individual and personal "self", which does not seem to have aroused much interest in recent scholarship, see A. Long, "Platonic Souls as Persons", in: R. Salles (ed.), Metaphysics, Soul and Ethics in Ancient Thought. Themes from the Work of R. Sorabji, Oxford 2005, p. 173-191. However, Long discusses Plato's view of the soul exclusively with respect to the concept of "person" as the subject of moral responsibility.

I do not mean to say that the dialogues offer, from a theoretical or a scientific point of view, any acceptable solution to the dualist-interactionist dilemma. However, there is no denving that from a historicalphilosophical point of view the *Timaeus* does provide a series of *con*sistent (albeit more or less satisfactory) answers for a solution of this dilemma. I therefore conclude by taking up again a remark by Kim. The mind-body union, within the classic Cartesian framework, remains mysterious, since "union" is a word which fails to explain anything and only manifests the mystery. We may surely say that it was God who united the mind and the body and dodge the question as to why he did it and in virtue of what powers. However, we cannot avoid asking how he did it, i. e. what kind of relationship obtains between the elements of the mind-body union.²⁷ This remark is particularly relevant to the parallel that I have tried to establish here. In the *Phaedo* Plato too describes the mind-body union as an absolute necessity regulated by god and therefore mysterious to man, while in the Timaeus he proposes a significant clarification: the sphere of divine action is reduced to the level of the likely discourse of myth, whereas the forms and modes of the mind-body union, the very laws and mechanisms of their interaction become the object of a series of psycho-physiological, or even neuro-biological, hypotheses.

Irrespective of whether Plato's view and the whole dualist-interactionist perspective can be defended, it is arguably the way in which he raises the issue and his determination in tackling it that initiates the long history of the mind-body problem. This is why he may be said to inaugurate not only the discipline which we now call "philosophy of mind", but perhaps also cognitive science as a series of hypotheses for explaining psychic and physiological phenomena.

27 J. Kim, Physicalism or Something Near Enough, p. 78: "The word "united" merely gives a name to a mystery rather than clarifying it. If God chose to unite my body with my mind, just what is it that he did? I am not asking why he chose to unite this particular mind with this particular body, or why he decided to engage in such activities as uniting minds and bodies, or whether he, or anyone else, could have powers to do things like that. (...) What I am asking for is more basic: If God "united" my mind and my body to make a person, there must be a relationship R such that a mind stands in relation R to a body if and only if that mind and that body constitute a unitary person. In uniting my mind and my body, God related the two with R. Unless we know what R is, we do not know what it is that God wrought".