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## WHAT THE MORTAL PARTS OF THE SOUL REALLY ARE

*Filip Karfik*

The *Timaeus* presents us with an elaborate account of the nature of the soul. As a matter of fact, it is a very curious account, especially for the modern reader, because it is based on the assumption that there is a soul of the universe which is the paradigm of all human souls. Consequently, Plato's – or, more cautiously, Timaeus' – account of the very substance of the soul, of its inner structure, its movements and its functions, deals first with the world soul and only then with the human one. What the analysis of the world soul in an earlier section of the dialogue has elaborated is simply taken for granted later on, when the account of the human soul is given. Nevertheless, this latter account not only uses the analysis of the world soul, but it enlarges it considerably by distinguishing two different kinds of soul, one immortal and one mortal. Actually, whereas the soul of the universe is altogether immortal, the human soul, according to Timaeus, has not only an immortal kernel but also a mortal part.<sup>1</sup> This means that only one part of the human soul has the same nature, the same structure, the same movements and the same functions as the world soul, while, for the other part, there is apparently no counterpart on the scale of the world. Now, in his account of the world soul Timaeus states quite precisely what its nature is, so that we know as well what the immortal part of the human soul is like. But we can ask whether Timaeus also gives a comparably accurate account of the nature of the *mortal* part of the human soul.<sup>2</sup> This is a question I would like to put under investigation in this paper.

Let me start by recalling the main features of the immortal soul as stated in Timaeus' account of the world soul. This soul was made by the Demiurge out of a mixture of three constituents, each of which was itself a mixture of two more

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<sup>1</sup> *Tim.* 69c7–8: ἄλλο τε εἶδος ... ψυχῆς ... τὸ θνητόν.

<sup>2</sup> Cf. Brisson (1974), 416–420 and (1999), 48–50; Pradeau (1998); Johansen (2004), 142–152.

primitive ones.<sup>3</sup> These three primary pairs are those of two varieties of three major genera we know from Plato's *Sophist*: Being (οὐσία), the Same (ταυτόν) and the Other (τὸ ἕτερον).<sup>4</sup> Each of them has on the one hand an indivisible and unchanging kind (ἀμέριστος καὶ αἰὲ κατὰ ταῦτὰ ἔχον [sc. οὐσία], τὸ ἀμερές) and on the other hand a divisible one (μεριστός) which is said to be coming into being in the realm of the bodies (ἢ περὶ τὰ σώματα γιγνομένη [sc. οὐσία]; cf. τὸ κατὰ τὰ σώματα μεριστόν).<sup>5</sup> Within each of the three genera, these two kinds are first blended into an intermediate one. The three intermediate mixtures thus obtained are then blended into a single mixture which constitutes the sort of material the Demiurge is subsequently working with. Thus, on this account we know that the world soul has neither the nature of an indivisible and unchanging (i.e. intelligible) form nor that of a divisible body which comes into being and passes away, but that it shares somehow in both, being itself something in between. Another thing we know is that its very composition, which underlies all subsequent qualifications, is a blend of Being, Identity and Difference – the three major genera which, according to the *Sophist*, in their mutual implications, are a necessary condition of every *logos*.

This original blend is subsequently given a thoroughly mathematical structure by the agency of its maker who 'divides' it into fractions, 'cuts' it into figures and sets them in motion (35B–36D). I shall not dwell on the mathematical details of this structure. Suffice it to say that it involves arithmetical ratios, geometrical figures and regular motions. As a result, the world soul is an intermediate substance of its own which has, besides its ontological nature of being a blend, as we have just described, its mathematically determined form of a three-dimensional figure moving regularly in itself. The overall appearance of this figure is of a system of embedded spheres with one supreme enveloping circle moving around one axis in one direction with one speed and seven different internal circles moving around another axis, partly in opposite directions and with different speeds to one another. The external circle is called by the Demiurge the Circle of the Same, whereas the sevenfold inner circle bears the name the Circle of the Different.

The geometrical construction and the mechanics of the world soul have their obvious astronomical and cosmological significance.<sup>6</sup> But the underlying

<sup>3</sup> *Tim.* 35A1–B1.

<sup>4</sup> *Soph.* 254B–259B.

<sup>5</sup> *Tim.* 35A1–6

<sup>6</sup> Cf. Karfik (2004), 99–100, 176–180.

mixture of the ontological genera, and the arithmetical determination of this mixture by sets of intervals and means, aim at another, epistemological, goal. They are supposed to explain the rational faculties of the world soul: its capacity to produce a *logos*, a rational account of what it encounters. This is stated quite explicitly in 37A–C: it is *because* the soul was mixed from intermediate portions of Being, Identity and Difference and *because* it was subsequently divided by certain intervals and linked together by arithmetical and geometrical means that it is able, as it imparts its own movements to the body of the world – a body which it envelops and pervades – to make statements about determinations of category, such as ‘same’, ‘different’, ‘in relation to’, ‘in such respect’, ‘in such manner’, ‘in such time’, which are relative to whatever it ‘touches’. What it ‘touches’ is on the one hand something which has the dispersed nature (οὐσίαν σκεδαστήν) of what is coming into being (τὰ γιγνόμενα) and on the other hand something which has the indivisible nature (οὐσίαν ἀμέριστον) of what is always the same (τὰ κατὰ ταὐτὰ ἔχοντα αἰεί).<sup>7</sup> Owing to the intermediate character of its substance, put together from the indivisible and the divisible ingredients, the world soul has access, so to say, to both these realms: to that of the intelligible forms as well as to that of the bodies which come into being and pass away. Being in touch with both of them it makes true statements either about the intelligible forms in relation to other intelligible forms or about bodies in relation to the intelligible forms or about bodies in relation to bodies. When these statements concern the intelligible forms only (τὸ λογιστικόν), they have the quality of ‘intelligence and science’ (νοῦς ἐπιστήμη τε); when they concern bodies (τὸ αἰσθητόν) they are qualified ‘true opinions and well-founded beliefs’ (δόξαι καὶ πίστεις ... βέβαιοι καὶ ἀληθεῖς). It is the Circle of the Same which announces – without a sound – the former statements, whereas the latter are spread throughout the whole of the world soul by the Circle of the Different.<sup>8</sup>

Thus the inner structure and the movements of the world soul account for a scale of different kinds of knowledge encompassing intellection (νοῦς) as well as opinion (δόξα). Although the world as a perfect living being has no particular sense organs,<sup>9</sup> it does have a kind of inner perception of sensible things which are all contained within it.<sup>10</sup> Opinions which arise from this

<sup>7</sup> *Tim.* 37A5–B3.

<sup>8</sup> *Tim.* 37B6–c3.

<sup>9</sup> Cf. 33c1–6.

<sup>10</sup> Reydam-Schils (1997), 261–265.

contact are said to be true because the revolution of the Circle of the Different is indeflectibly regular,<sup>11</sup> just as is the revolution of the Circle of the Same<sup>12</sup> which gives rise to intellection. Even though the most condensed account of the cognitive faculties of the world soul in 37A–C doesn't say so quite explicitly, it seems that it actually assigns the very faculties of νοῦς and ἐπιστήμη to the Circle of the Same, just as those of δόξα and πίστις are assigned to the Circle of the Different. This fits well with the astronomical framework of the movements of the world soul. The revolution of the Circle of the Same encompasses and carries with it all the other revolutions of the sevenfold Circle of the Different. It has a κράτος,<sup>13</sup> a ruling power, over them while being itself undisturbed by them. In its simple uniform revolution it touches the intelligible forms and imparts this highest kind of knowledge to the revolutions of the Circle of the Different which thus share in the perfect knowledge of the Circle of the Same. Coming into contact with the sensible bodies the revolutions of the Circle of the Different are therefore able to identify them rightly as what they are like in terms of the intelligible forms.<sup>14</sup>

Let us now turn to human souls which are, according to Timaeus' explanation of the origin of animal species, also those of animals. They have, as already emphasized, two parts: an immortal one and a mortal one. The immortal part of these souls is, for each of them, made, by the Demiurge himself, out of the same basic constituents as the world soul, following the same blending procedure and along the same arithmetical, geometrical and mechanical lines.<sup>15</sup> The outcome is therefore nearly the same: a mathematically structured intermediate substance of its own with an overall spherical shape moving in itself along the Circles of the Same and of the Different.<sup>16</sup> The only difference from the world soul that is mentioned is that the original constituents of the basic blend are the 'remains' (ὑπόλοιπα) of the former ones and are no more of the first water, but of the second- and third-class. Despite this difference of quality, the immortal part of the human soul has basically the same inner equipment, and can therefore accomplish the same cognitive functions, as the world soul. If it works in accordance with its original nature<sup>17</sup> – which, as a

<sup>11</sup> *Tim.* 37B7: ὁρθὸς ἴων.

<sup>12</sup> *Tim.* 37C2–3: εὐτροχος ὤν.

<sup>13</sup> *Tim.* 36C7.

<sup>14</sup> Karfík (2004), 197–198.

<sup>15</sup> *Tim.* 41D4–7.

<sup>16</sup> *Tim.* 43A4–5; 43D1–6; 44B2–3; 44D3–5; 47B8; 90C7–D5.

<sup>17</sup> *Tim.* 90D5: κατὰ τὴν ἀρχαίαν φύσιν.

matter of fact, it rarely does – it is capable of an act of intellection (νοῦς) that grasps the truth, i.e. the intelligible forms,<sup>18</sup> as well as of an act of true opinion based on sense perception.<sup>19</sup>

And yet, the condition of the immortal part of the human soul differs considerably from that of the world soul. This is not, however, due to its substance or inner structure, but to the external conditions in which it is condemned to live once it is tied up with the mortal body. Unlike the world soul, the immortal part of the human soul does not encompass all that which is bodily within it. Quite to the contrary, it finds itself in a body which is exposed to the influence of other bodies and even dependent on them. Being as it is a limited particle, linked up with a limited bodily mass, the immortal part of the individual soul is a weaker partner of the body in comparison with the all-encompassing and all-pervading world soul in its union with the body of the universe. It doesn't dominate the human body from the very beginning of their common life; rather it must work hard – indeed interminably – to get control over the bodily mass which disturbs its movements by a powerful impact.<sup>20</sup> When it enters the small body of a child the immortal part of the soul is first broken down almost completely.<sup>21</sup> The Circle of the Same stops revolving as the currents of sense perception move against it.<sup>22</sup> As a result, the soul loses the faculty of intellection.<sup>23</sup> Since the Circle of the Same doesn't exercise any more its ruling power,<sup>24</sup> the Circle of the Different gets out of control and its different revolutions become irregular and even chaotic under the impact of sense perception.<sup>25</sup> The consequence of this lesion is that the movements of the Circle of the Different become altogether irrational<sup>26</sup> and the statements which they continue pronouncing are false.<sup>27</sup> It takes long years of growth and of consolidation of the human body, supported by the remedies of education, before the immortal part of the soul restores its badly-damaged revolutions

<sup>18</sup> Cf. *Tim.* 51D5–6 and 90C1–3 together with 51D3–5.

<sup>19</sup> *Tim.* 44B1–7 together with 51D2–7.

<sup>20</sup> *Tim.* 42A3–D2.

<sup>21</sup> *Tim.* 43D2–3.

<sup>22</sup> *Tim.* 43A–44C.

<sup>23</sup> *Tim.* 44A8: ἄνους ψυχῆ γίγνεται.

<sup>24</sup> *Tim.* 43D3; 44A4–5.

<sup>25</sup> *Tim.* 43D3 ff.

<sup>26</sup> *Tim.* 43E3: φέρεσθαι μέν, ἀλόγως δὲ φέρεσθαι.

<sup>27</sup> *Tim.* 43E9–44A: αἱ περιφοραὶ ... τὰναντία τῶν ἀληθῶν προσαγορεύουσαι ψευδεῖς καὶ ἀνόητοι γεγόνασιν.

and the Circle of the Same can regain the upper hand over the Circle of the Different.<sup>28</sup> Only then, if it succeeds – something which is not always the case – does a human possessor of an immortal soul become ἔμφορον,<sup>29</sup> i.e. sharing in the faculty of νοῦς.<sup>30</sup>

This description of the impact a human body has upon an individual immortal soul during its incarnation gives the impression that there is an immediate interaction between body and soul. Actually, in the passage in which Timaeus first describes in some detail the fabrication of human beings by the young gods he says literally: ‘They fastened the revolutions of the immortal soul in a body flowing hither and thither.’<sup>31</sup> On this account it seems that there is nothing between an immortal soul and a mortal body. The body acts directly upon the soul. We may ask how this is possible. How can a visible body act upon an invisible soul? And vice versa: how can an invisible soul act upon a visible body, supposed as it is to regain control of it? A general answer to this question is that body and soul can interact in so far as they are both in motion. It is always one motion acting upon another: this way or the other way round.<sup>32</sup> The soul, it is true, is something different from the body, but not totally different. This is a point which should be stressed against the widespread belief that the soul in Plato is utterly immaterial. As a matter of fact, we know that it was half made out of a substance which has something to do with bodies – out of Being, Sameness and Difference which ‘come into being in the realm of the bodies’ – and we know as well that it is all the time moving just as the bodies are almost forever moving. A motion which presupposes an extended – somehow divisible – substructure is their common lot. In the case of the bodies it is, however, a different kind of movement to that in the case of the souls. The movements of the souls are naturally circular in accordance with their spherical shapes, whereas the movements of the bodies, which were shaped by the Demiurge into the forms of the four regular solids composed each of a number of right-angled triangles, are naturally travelling in any of the six rectilinear directions – forwards and backwards, upwards and downwards, right and left.<sup>33</sup> The clash between soul and body is therefore a clash between

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<sup>28</sup> *Tim.* 44B1 ff.

<sup>29</sup> *Tim.* 44B7.

<sup>30</sup> *Tim.* 51E5–6.

<sup>31</sup> *Tim.* 43A4–6.

<sup>32</sup> Cf. Karfik (2004), 197f.; Johansen (2004), 141f.

<sup>33</sup> Cf. Karfik (2004), 150–185.

two different kinds of motion. It can result, roughly speaking, either in a transformation of a rectilinear motion into a circular one, or vice versa, or in a temporary standstill. A soul holding power over a body imparts to it circular motions of its own; a body overcoming a soul ‘twists’, ‘breaks’ and ‘deforms’ its circular motions and lets them go ‘now back, now obliquely, now upside down’ or even stops them.<sup>34</sup>

Let us now have a closer look at the union of the immortal part of the soul with the human body. The young gods are given the order, by their father, to link what is immortal to what is mortal.<sup>35</sup> The Demiurge himself then fabricates the immortal souls and gives them over to his aides to whom he assigns a double task: first, to fabricate mortal bodies, and second, to produce ‘all the part of a human soul that there is still need to add’.<sup>36</sup> This part of a human soul which the young gods must add to its ‘immortal principle’, fabricated by the Demiurge himself, is later on in Timaeus’ account almost constantly referred to as the ‘mortal kind’ or ‘mortal part’ of the soul.<sup>37</sup> We are thus confronted with three different items: an immortal principle of the human soul on the one hand, a mortal human body on the other and a mortal part of the human soul somewhere in between. A question immediately arises: What is this mortal part of the human soul? Is it, as a *soul*, something like the immortal part? Or is it, as a *mortal* part, rather something like the mortal body? Or is it an entity of its own, being just what it is, neither an immortal soul nor a mortal body? But what kind of thing, then, is it? We would expect Timaeus to answer these questions. But he doesn’t. This is a striking fact, particularly if compared with the detailed accounts he gives both of the immortal soul and of the mortal body. He never says what the mortal part of the soul was made from or what shape it was given. He actually never says what it is in terms of the ontological and mathematical characteristics he makes use of in describing the making of the immortal soul and of the primary bodies, nor does he describe the procedure used by the young gods in producing the mortal parts of the souls.

What, then, actually is the mortal part of the soul? Although we don’t get a definite answer as to the question of *what* it is, we are told, instead, what is to

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<sup>34</sup> *Tim.* 43D2–E4.

<sup>35</sup> *Tim.* 41D1–2: ἀθανατῶ θνητὸν προσυφαίνοντες.

<sup>36</sup> *Tim.* 42D7–E1 (tr. after Cornford).

<sup>37</sup> *Tim.* 61C7–8: ψυχῆς ὅσον θνητόν. 65A5: τῶ θνητῶ τῆς ψυχῆς. 69C7–8: ἄλλο τε εἶδος ... ψυχῆς ... τὸ θνητόν. 69E4: τὸ τῆς ψυχῆς θνητὸν γένος. 73D3: τὸ λοιπὸν καὶ θνητὸν τῆς ψυχῆς.

be found *in it* and what *it* is to be found *in*. Let us examine Timaeus' answers to *these* two questions in order to come closer to an answer to the first one.

In several passages Timaeus states quite clearly what is to be found *in* the mortal part of the soul. The most explicit of these passages is 69C8–D6. Here we are told that the mortal part of the soul has in itself 'powerful and necessary affections', namely pleasure and pains, audacity and fear, anger and hope, and that these affections are mixed together with irrational sense perception and with desire capable of anything. This account corresponds to an earlier one (42A2–B1) in which the Demiurge explains to his aides what will follow once the immortal soul has been planted into a mortal body: under the impact of some parts of the body that come in and go away – processes of nourishment and secretion are meant – there will arise, out of the violent affections, first, a kind of sense perception, secondly, a desire mixed together with pleasure and pain, thirdly fear and anger and all similar affections which follow them. Accordingly, these two passages taken together tell us that the mortal part of the soul is a place where bodily processes give rise to affections (*παθήματα*) and these affections to sense perception (*αἴσθησις*) which is irrational (*ἄλογος*); the irrational sense perception, in its turn, is linked with desire (*ἔρως*) and as such it produces more specific affections such as pleasure (*ἡδονή*) and pain (*λύπη*), anger (*θυμός*) and fear (*φόβος*).

If now, in the light of these clarifications, we look once again at the description of the union between immortal soul and human body in 43A ff., we understand that what has appeared at first glance as an immediate union of the immortal soul with the body is in fact a description depicting processes which are to be located *in the mortal part of the soul*. The currents of external bodily substances acting upon the human body give rise to affections (*παθήματα*) which produce movements (*κινήσεις*) running through the body until they reach the soul, i.e. the Circles of the Same and of the Different of its immortal part.<sup>38</sup> These very movements stretching between the periphery of the affected body and the revolutions of the immortal part of the soul are termed *αἰσθήσεις*<sup>39</sup> and constitute, together with the *παθήματα* from which they start, the first, most basic layer of what Timaeus describes in 42A and in 69C–D as going on in the mortal part of the soul.

In another passage (64A–C) where Timaeus sets about analysing the affections of pleasure and pain, we are given a more detailed account of how the movement

<sup>38</sup> *Tim.* 43B5–44B1, 43C5–7, 44A5.

<sup>39</sup> *Tim.* 43C5–7.

of sense perception comes about and spreads through the human body. The human body is formed out of the four elements. These elements, each of which has the form of one of the four regular solids, differ in their mobility according to their geometrical properties: fire, a pyramid, is the most mobile element, air, an octahedron, a less mobile one, water, an icosahedron, is rather hard to move and earth, a cube, is the most immobile of them all.<sup>40</sup> Now, different tissues of the human body are different mixtures of the four elements.<sup>41</sup> In one of them, let us say in the tissue of the eye, there is a greater amount of fire, in another one, let us say in the bones, there is a greater amount of earth. So one is more and another less mobile.<sup>42</sup> If an external body acts upon the human one it can encounter either its more or its less mobile parts. In both cases it produces a *πάθος* in them. But if these parts are in their inner elemental structure hard to move or rather immobile – as e.g. the hairs or the nails – the movements acting upon them stop moving in them and don't stretch farther.<sup>43</sup> The *πάθος* which is thus produced remains *ἀναίσθητον*, i.e. 'unperceived'. If, on the contrary, they act upon a tissue which is easily moved, they go on and make their way through it, setting its elemental constituents in a kind of circular motion which transmits the same *πάθος* farther and farther (*διαδίδωσιν κύκλω μόρια ἕτερα ἑτέροις ταῦτόν* sc. τὸ *πάθος*), until it reaches the rational part (*τὸ φρόνιμον*) of the human being and announces to it what is the affecting quality (*δύναμις*) of the external body by which it was produced.<sup>44</sup> Such a *πάθος* which pervades the human body and eventually touches the rational part of the human being becomes *αἰσθητόν*, i.e. 'perceived'.

On this description we see more precisely what the *αἴσθησις* is. It is a circular movement of elemental particles of some of the more mobile tissues of the human body which acts upon the revolutions of the immortal soul.<sup>45</sup> This picture is supported by the detailed account Timaeus gives of the process of seeing in 45B–46A. The sense of sight works as follows: There is a current of a very fine fire

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<sup>40</sup> *Tim.* 55D8–56A3.

<sup>41</sup> *Tim.* 73B ff. Cf. Solmsen (1950), 445–459; Brisson (1974), 420–423.

<sup>42</sup> *Tim.* 64C4–C7. Cf. 45B2–46A2 and 73E1–5.

<sup>43</sup> *Tim.* 64B6–C5.

<sup>44</sup> *Tim.* 64B3–6.

<sup>45</sup> According to Brisson (1997), 157–159, the very agent of transmission of the *πάθη* within the human body is ultimately the blood. More cautiously, I would say that it is the fire as the most active element within the human body (78A). Accordingly, the fire procures the link Brisson is missing between the heart and the immortal soul, cf. Brisson (1997), 164f. The fire can act on the immortal soul because the latter is not altogether incorporeal (*pace* Brisson *ibid.*).

emanating from the eye. This current coalesces with the kindred fire of daylight into a single body – a sort of fiery cone. This conic fiery body which crosses the eye outwards and inwards is said to be through and through *ὁμοιοπαθές*, i.e. having in all its parts the same capacity to be acted upon. Owing to this it transmits the movements (*κινήσεις*) of whatever of the external things it touches or by whatever it is itself touched through the bulk of the human body, until these movements reach the soul. This is what the sense perception (*αἴσθησις*) of sight consists in. The fiery conic body crossing the eye is, therefore, a sort of extension of the human body, a transient tissue growing out afresh whenever we open our eyes in daylight,<sup>46</sup> enabling our body to get into contact with the objects to be seen which can thus act upon it. Even if we close our eyes and fall asleep, that portion of the fine fire which remains within our body keeps moving. As it can't emanate from the body it diffuses its *δύναμις* within it and mollifies its inner motions or, if still disturbed by the more powerful impact of the objects previously seen, it displays *φαντάσματα* of them thus giving rise to dreams.<sup>47</sup>

Although it is not expressly said, these movements of the inner fire are to be thought of as more or less circular like those of every *αἴσθησις* described in 64B or like the circulation of the breath,<sup>48</sup> of the blood<sup>49</sup> and of other humours in a sound body.<sup>50</sup> After all, it is always the fire, as the most mobile of the four elements, which sets the other ones in motion and keeps them moving. This is true for the body of the universe as well as for that of a human being.<sup>51</sup> Moreover, in the case of the world body we are told expressly that it is the revolution of the universe – in fact the revolution of its outmost sphere owing to the movement of the Circle of the Same of the world soul – which pushes the particles of fire inside the body of the world into the interstices between the particles of the other elements, and keeps the whole body of the universe unceasingly moving,<sup>52</sup> as it were. In the last analysis, it is the circular motion of the soul which, through the agency of the most mobile of the elements, causes the movements of the body.<sup>53</sup> We may presume that this is so – at least

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<sup>46</sup> *Tim.* 64D5–7.

<sup>47</sup> For a more detailed analysis of the process of seeing cf. the contribution of Katerina Ierodiakonou in this issue; similarly for the analysis of the process of hearing cf. the contribution of Péter Lautner.

<sup>48</sup> *Tim.* 79A–E.

<sup>49</sup> *Tim.* 70B1–2.

<sup>50</sup> *Tim.* 83A2.

<sup>51</sup> *Tim.* 58A2–C4 and 78A3–6. Cf. Karfik (2004), 162–164.

<sup>52</sup> *Tim.* 58A4–C4.

<sup>53</sup> Cf. Karfik (2004), 176–180.

to some extent – in the case of the human body too, and that there is a sort of connection between the circular motions of the immortal part of the human soul and the motions of the most mobile among the elemental constituents of the human body.

To come back to our questions, if the mortal part of the soul is that very thing wherein sense perception takes place, we are now in a position to say at least what sense perception is. It is a movement caused in some parts of the human body by external bodies and transmitting through it an affection which reaches the rational soul enclosed within the human body. This movement has two termini between which it takes place: the external body acting upon the human body on the one hand and the rational, i.e. immortal, soul on the other. These two termini must be external to the mortal part of the soul. Therefore, if we want to know what the mortal part of the soul is, we are reduced to asking what remains between these two termini. There remains obviously only the human body or more precisely those parts of it which are, owing to their more mobile tissues, capable not only of receiving, but also of transmitting, down to the rational soul, the affections caused in them by the external bodies.

Let us now consider briefly the other affections occurring in the mortal part of the soul. The most important of them are pleasure (ἡδονή) and pain (λύπη). A painful affection (πάθος ἀλγεινόν) is defined as that which occurs within us against nature, violently and suddenly.<sup>54</sup> A pleasant affection (ἡδὺ πάθος) is a sudden movement of what went against nature back to its natural condition.<sup>55</sup> Both pleasure and pain are produced by movements<sup>56</sup> occurring in the human body. These movements differ from those producing sense perception in that they induce a change in the nature – i.e. in a given elemental structure – of the tissues they affect, while differing, on the other hand, from unperceived affections in that they do so in a violent and sudden manner.<sup>57</sup> Anyway, they are movements of parts of the human body. Like sense perceptions the affections of pleasure and pain are said to take place in the mortal part of the soul<sup>58</sup> or to affect it,<sup>59</sup> but they obviously also affect the rational part of the soul, as the

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<sup>54</sup> *Tim.* 64C8–D1: τὸ μὲν παρὰ φύσιν καὶ βίαιον γιγνόμενον ἄθρόον. 64E6: ἀλλοτριούμενα.

<sup>55</sup> *Tim.* 64D1–2: τὸ δ' εἰς φύσιν ἀπιὸν πάλιν ἄθρόον. 65A1: καθιστάμενα δὲ εἰς τὸ αὐτὸ πάλιν.

<sup>56</sup> *Tim.* 64E6: κινήσεις.

<sup>57</sup> *Tim.* 64E4–65B3.

<sup>58</sup> *Tim.* 69C8–D7.

<sup>59</sup> *Tim.* 65A5.

account of the diseases of the soul caused by disorders in the constitution or in the functioning of the human body shows.<sup>60</sup> Thus, like sense perceptions, they are undoubtedly something which belongs to the human body, to its tissues and its humours. But we may ask if they are to be thought of as bodily processes or movements which ultimately need to act upon the movements of the rational soul, like sense perceptions, or if they do so only in some cases while not in others, as some formulations in Timaeus' account may suggest.<sup>61</sup>

In order to move forward to the remaining affections located by Timaeus in the mortal part of the soul, namely desire (ἐρως), fear (φόβος), anger (θυμός), audacity (θάρρος), hope (ἐλπίς) and their like we must now change our perspective and follow Timaeus' account of *where*, in the human body as a whole, the mortal part of the soul is to be found. At this stage of our enquiry this change of perspective shouldn't come as a surprise, since the only thing we know as yet about the mortal part of the soul is that it can be found nowhere other than in the human body. Where, then, is it in the body?

What now follows will remind us of the famous doctrine of the tripartite soul known from the *Republic* and the *Phaedrus*.<sup>62</sup> But let us remain within the boundaries of the *Timaeus* in order to grasp the systematic unity – if such there is – of the theory which is put forward in this dialogue. To begin with, we are told that the immortal soul with its revolutions of the Same and of the Different was fastened by the young gods into what is now called the head<sup>63</sup> or, more precisely speaking, into that part of the marrow which is called the brain and which is itself located in the head<sup>64</sup> under the shelter of the cranium.<sup>65</sup> The mortal 'kind' (εἶδος) of soul was located separately from the immortal one in the breast (στήθεις) or in what is, according to Timaeus, called the trunk (θώραξ).<sup>66</sup> Still, the separation of the mortal kind of soul from the immortal soul is not an absolute one. There is a connection between them, a sort of isthmus, namely the neck joining the head with the trunk.<sup>67</sup> This, however, is only a very general description of the location of the mortal kind of soul in the

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<sup>60</sup> *Tim.* 86B1–87B9

<sup>61</sup> Cf. 65A5, 77B5–6

<sup>62</sup> On this vexed issue see e.g. Taylor (1928), 496–499; Robinson (1970), 119–125; Rist (1992); Johansen (2004), 153–159.

<sup>63</sup> *Tim.* 44D3–6. Cf. 69D6–E3.

<sup>64</sup> *Tim.* 73C6–D2.

<sup>65</sup> *Tim.* 73E6–7.

<sup>66</sup> *Tim.* 69E3–4.

<sup>67</sup> *Tim.* 69E1–3.

human body. As a matter of fact, Timaeus immediately provides a much more detailed one.

This detailed account starts in 69E with a distinction between two different kinds of the mortal part of the soul, one better (τὸ ἄμεινον) and one worse (τὸ χεῖρον). This is the first time in the *Timaeus* that we hear that the mortal kind of soul has itself two kinds. It is worth remembering that we still don't know what the mortal kind of soul actually is. If we hope that we shall now be told what its two kinds are made from or consist in, we shall be disappointed. Just as in the case of the whole of the mortal kind of soul we were only told *what* was to be found *in it* and *in what it* was itself to be found, we now learn what is to be found in the better and in the worse kind of it and wherein these two different kinds are themselves to be found within the human body.

In order to locate each of the mortal kinds separately, the trunk of the human body is divided into two different sections partitioned by the diaphragm.<sup>68</sup> We can now term them more appropriately 'parts'. The better part of the mortal soul is located nearer to the head, the worse part in a more remote section of the trunk. In the better part, affections of anger and fear come about,<sup>69</sup> in the worse one, now also termed the appetitive part (τὸ ἐπιθυμητικὸν τῆς ψυχῆς), we find the affections of desire for food, for drink and for whatever the body needs.<sup>70</sup> We may ask if this is the ἔρωσ mentioned in two previous passages enumerating the affections occurring in the mortal part of the soul and described in one of them as 'capable of anything' (ἐπιχειρητῆς παντός).<sup>71</sup> It is hard to be certain. On the one hand, τὸ ἐπιθυμητικὸν is now termed 'wild beast' (θρέμμα ἄγριον) which apparently corresponds to 'capable of anything', but on the other hand Timaeus doesn't use in the present context the term ἔρωσ which seems to be reserved for a later discussion of the desire for copulation (τῆς συνουσίας ἔρωσ) and generation (τοῦ γεννᾶν ἔρωσ).<sup>72</sup> This latter, however, is presented as an animal (ζῷον) of its own, with a sort of soul (ἔμψυχον), implanted in men as well as in women, 'disobedient and imperious' in men, and in women 'troublesome to the utmost'.<sup>73</sup> These two forms of desire, the one for food and drink, the other for sexual union and generation, are obviously different in their objectives, but they

<sup>68</sup> *Tim.* 69E5–70A2.

<sup>69</sup> *Tim.* 70A3: ἀνδρείας καὶ θυμοῦ. 70B3: θυμοῦ. 70C1–2: ἐν τῇ τῶν δεινῶν προσδοκίᾳ καὶ τῇ τοῦ θυμοῦ ἐγέρσει. 70D5: μετὰ θυμοῦ.

<sup>70</sup> *Tim.* 70D7–8.

<sup>71</sup> *Tim.* 69D4.

<sup>72</sup> *Tim.* 91A1–B4.

<sup>73</sup> *Tim.* 91B4–C7.

have something in common which allows Timaeus to describe them in similar terms as kinds of indomitable beast living what is almost a life of their own within us. Moreover, the passage dealing with the desire for sexual union and generation shows that the terms *ἐπιθυμία* and *ἔρωσ* can be used in a practically synonymous way.<sup>74</sup> So it would be reasonable to take *ἔρωσ* in those passages, where it characterizes the sort of things which occur in the mortal part of the soul, as denoting quite generally every sort of appetite or desire, be it for food and drink or for sexual union and generation.

But there is another important thing to be said about Timaeus' description of both parts of the mortal soul. These two parts have a special relationship, on the one hand, to certain organs located in the trunk of the human body and, on the other hand, to the rational soul which has its tower in the head. The better part of the mortal soul – the *θυμός* – has a close relation to the heart, while the worse one – the *ἐπιθυμητικόν* – to the liver. In both cases this relation to a bodily organ has something to do with the sort of influence which the rational – immortal – kind of soul exercises upon these mortal parts. Nevertheless, the way in which this influence is exercised differs considerably in the case of the *θυμός* as well as in that of the *ἐπιθυμητικόν*.

In the case of the *θυμός* the influence of the rational soul is immediate. That is why the better part of the mortal soul is better: it is, as a matter of fact, obedient to the orders of reason (*τοῦ λόγου κατήκοος*) and helps the reason to act upon the desires (*ἐπιθυμίας*) which are, by their very nature, disobedient to it.<sup>75</sup> To put it more clearly, it means that the immortal soul acts immediately upon the better part of the mortal soul and that this, subsequently, acts upon the worse part of it, this latter action being mediated by the *heart*. Actually, the better part of the mortal soul acts upon the heart – more precisely upon the fire in the blood which boils there – and, subsequently, through the whole system of veins, upon every part of the body which is capable of being affected by sense perceptions (*πάν ὅσον αἰσθητικὸν ἐν τῷ σώματι*).<sup>76</sup> Through this mediation and under this impact the sensitive parts of the body become obedient to the orders of reason.

But there is also another kind of mediation between reason (*λόγος*) and the worse part of the mortal soul in the lower section of the trunk. This part is the worse one precisely because it can't be immediately acted upon by reason, i.e. by the movements of the immortal soul. Indeed, it is incapable of grasping any

<sup>74</sup> *Tim.* 91c7–d1: ἡ ἐπιθυμία καὶ ὁ ἔρωσ.

<sup>75</sup> *Tim.* 70a4–7.

<sup>76</sup> *Tim.* 70a7–c1.

*logos*.<sup>77</sup> But, in spite of this, it isn't totally devoid of any capacity of perception. It can be affected by likenesses (εἴδωλα) and phantasms (φαντάσματα) of the *logoi*.<sup>78</sup> These, however, must be bodily processes. It is at this point that the *liver* does its work. It functions as a sort of organic mirror reflecting images of the rational thoughts (διανοήματα) and transmitting them, thus materialised, to the lower part of the mortal soul.<sup>79</sup> How the immortal soul impregnates the liver with these images is not altogether clear. The only thing Timaeus says about it is that there is a power emanating from the intellect (ἡ ἐκ τοῦ νοῦ φερομένη δύναμις) that produces imprints in the passive matter of the liver – a description which strongly reminds us of the way Timaeus earlier depicted the making of the imprints of the intelligible forms in the *χώρα*.<sup>80</sup> These imprints, however, are thoroughly corporeal qualities, such as bitterness and sweetness. As such they have an impact upon the worse part of the mortal soul: τὸ ἐπιθυμητικόν. They strike terror into it and threaten it or, contrariwise, render it gracious and happy.<sup>81</sup>

As we see, the better part of the mortal soul acts upon the heart, while the liver acts upon the worse part of the mortal soul. Accordingly, the rational soul acts *directly* upon the better part and *indirectly*, through the mediation of the heart and of the liver, upon the worse part. The meaning of the doctrine of a twofold influence – via heart and via liver – on the appetitive part of the mortal soul seems to be obvious: it explains the difference between, on the one hand, a conscious regulation of the ἐπιθυμητικόν involving acts of will and passing thus through the θυμός and the heart, and, on the other hand, a regulation of the ἐπιθυμητικόν through the liver which works out of the reach of the will and even out of the domain of consciousness.

These mechanisms are very interesting from the point of view of the questions we are examining. First, they show that the mortal parts of the soul don't only transmit the affections of the body to the rational faculties of the immortal soul, but they make it clear that the mortal parts work also in the opposite direction, transmitting the rational movements of the immortal soul down to the affections of the body. The most interesting thing, however, in this account is the intricate interaction between the rational soul, the mortal parts of the soul and the two prominent organs of the body. As a matter of fact, the

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<sup>77</sup> *Tim.* 71A3.

<sup>78</sup> *Tim.* 71A5–6, B5, C3.

<sup>79</sup> *Tim.* 71A3 ff.

<sup>80</sup> Cf. 71B with 50C.

<sup>81</sup> *Tim.* 71B5–D2.

higher – spirited – part of the mortal soul is capable of being acted upon by the rational soul *and* of acting upon the body, while the lower – appetitive – part of it is incapable of being acted upon by the rational soul and must, therefore, be acted upon by bodily organs or bodily processes excited in these organs by the rational soul, should the lowest part of the soul be subdued to the rational movements of the highest one. On this account, we may be even more confused about the very nature of the mortal kind of soul because its better part, the *θυμός*, seems to be something which is very close to the immortal soul, while its worse part, the *ἐπιθυμητικόν*, appears to be even more remote from it than the bodily organs of the heart and liver. Isn't, then, the *θυμός* closer to the immortal soul than to the *ἐπιθυμητικόν*, and isn't the *ἐπιθυμητικόν* closer to the body than to the *θυμός*? But if this were so – as it indeed appears to be – would it not break the unity of the 'mortal kind' of the soul in relation to the immortal soul on the one hand and in relation to the body on the other?

Let us now turn to another passage where we are told something more definite about the nature of the mortal soul. This is the section 73B2–E1 dealing with the constitution of the marrow (*μυελός*). Timaeus tells us here that the god – he actually means the younger gods<sup>82</sup> – fastened the different kinds (*γέννη*) of soul into the most subtle tissue of the marrow. After having explained how they had mixed the *panspermia* of marrow out of the most straight and smooth elementary triangles, he describes how the marrow was divided into portions and given the shapes (*σχήματα*) which were required for different kinds of soul. The gods first took one portion of marrow in order to fashion the spherical 'soil' of the brain in which the divine seed of the immortal soul was to be sown. Then they fashioned another portion of the marrow into the shapes that the remaining kind of soul – i.e. the mortal one – was to receive. These shapes are characterised as round as well as elongated (*ἄμα στρογγύλα καὶ προμήκη*). This means that the marrow wherein the mortal kind of soul was to be put was given the form of many long thin cylinders, like ropes, and consequently that this is also the shape of the mortal kind of soul. One would be inclined to believe that Timaeus is speaking here about the nerves, but he isn't, since the discovery of the nerves took place only with Herophilus and Erasistratus in Hellenistic times.<sup>83</sup> Timaeus is clearly speaking here of the marrow in the bones, both in the backbone and in the other bones of the human body, which, according to him, fulfil roughly the same functions that we today, or indeed later ancient physicians, would assign to the nerves.

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<sup>82</sup> Cf. Karfik (2004), 114–117.

<sup>83</sup> Cf. Solmsen (1961).

Into these parts of the marrow, we are expressly told, the mortal kind of soul was fastened by means of 'bonds' (δεσμοί). What these bonds are isn't altogether clear. Nonetheless, they are mentioned several times, once as οἱ τοῦ βίου δεσμοί,<sup>84</sup> once as πάσης ψυχῆς δεσμοί,<sup>85</sup> once just as οἱ τῆς ψυχῆς δεσμοί.<sup>86</sup> In 73D5 Timaeus says that they were put forth, 'as if from anchors', from the marrow within the bones, and in 81D6–E1 he makes it clear that they are clenched – as if themselves fastened by some other bonds – by the utmost cohesive triangles constitutive of the marrow. From this grip, they are released only at the moment of natural death when the elementary triangles have become worn out and the cohesion of the marrow is weakened by old age.

Once again, we would like to ask what these 'bonds of life' or 'bonds of the soul' are, and once again we would look for a definite answer in vain. The only thing we can safely say about them is that they are obviously the very same part of the mortal – but also, it seems, of the *immortal* – kind of soul by which it is linked together with the most elementary structure of the body, namely with the triangular infrastructure of the four regular solids constituting the elements. To put it differently, it means that there is a part of the human body – the marrow in the cranium and in the bones – where the soul, immortal and mortal, is tied up to the very foundation of the bodily structure and that from there it spreads through the other tissues of the human body.

If we now try to sum up what we have learnt about the mortal kind of soul, we must, I think, confess that we still don't know precisely what it is. Nevertheless, we may now risk, in full awareness of the difficulties of the matter, a tentative answer to this question. We have to acknowledge, it seems to me, that the mortal part of the soul really doesn't have any substance of its own. If it is something at all, it is a sort of movement. If we should say what sort of movement and a movement of what, I would suggest the following answer: it is a movement of certain well-disposed bodily tissues, excited in them by the circular motion of the immortal soul. It has itself, therefore, at least to some degree, the form of circular motion. But being a movement of bodily tissues, it can't, on the other hand, be perfectly circular and must, at least to some degree, also take the form of rectilinear movement, proper to the elementary particles of the bodies. To be sure, this must already happen in the brain where the immortal soul imparts its circular movements to the soft matter of the marrow into which it is 'tied up'

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<sup>84</sup> *Tim.* 73B3.

<sup>85</sup> *Tim.* 73D6.

<sup>86</sup> *Tim.* 81D6–7.

and which is formed out of the most subtle elementary bodies. Subsequently, as the movement of the marrow spreads down through the backbone, it becomes a sort of particular combination between circular and rectilinear motion, namely that of a spiral movement evolving down the bones as far as the extremities of the limbs. From inside the bones it spreads in a still more rectilinear – though to some degree always circular – form, throughout all the sensitive parts of the human body thus rendering it alive. On some special parts of the body it has a special impact, such as on the heart and on the liver. Passing through these special organs, being modified there and carried thence forth – through the blood – to other tissues, it maintains and regulates all movements of the human body as an organic whole. In fact, these very movements in their cyclic regularity constitute the body as a living organism – as a bodily structure which throughout all necessary changes remains substantially the same as long as it keeps the same nature. In reverse, tissues, thus rendered part of a living organism, if acted upon by other bodies, undergo affections arising from the specific powers of these bodies and transmit these affections, in the opposite direction, though along the same routes, up to the immortal soul in the brain. There the circular movements of the rational soul – more precisely speaking those of the sevenfold Circle of the Different – ‘touch’ these transmitted affections, ‘saying’ what they are and what they aren’t. That means that the movements of the Circle of the Different are acted upon by movements of affected tissues, transmitted up to them ultimately by the agency of the marrow. The motions of the Circle of the Different recognize the source of these transmitted movements, owing to the revolution of the Circle of the Same, in so far as this latter remains in touch with the intelligible forms and so enables the rational soul to judge what the transmitted affections are like.

To put the whole as simply and as briefly as possible, the ‘mortal kind’ of soul or the ‘mortal parts’ of it are but specific movements of specific tissues, both arising from the immortal soul and acting upon it. There is no mortal soul apart from the body of a living being nor is there any substrate of it other than the bodily tissues of an organism. That is why Timaeus can say *wherein* the mortal kind of soul is to be found and what happens *in it*, but not *what it is in itself*.

An objection, however, can be raised against this interpretation. Indeed, there is a well-known passage in the *Timaeus* dealing with the nature of plants (77A–C) where it is explicitly said that these are living beings participating only in the third kind of soul, i.e. in the ἐπιθυμητικόν.<sup>87</sup> Isn’t this proof that there are living beings with *no* immortal kind of soul and that, therefore, the mortal

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<sup>87</sup> *Tim.* 77B3–6.

kind of soul, and even its lower part alone, is an animating principle *of its own*? I don't think so. A plant, Timaeus says, is a living being because it partakes in life, but it is a sort of living being which is 'fixed and rooted', because it is devoid of self-motion.<sup>88</sup> Everything it accomplishes it does so by being affected by something else.<sup>89</sup> It is a living being whose movements have not their principle within this being itself. If such a being is not, despite of this, a mere body, but a *living* one, it must be due to the fact that its life is ultimately dependent on a kind of soul which *is* self-moving, but which is not *its own* soul. What soul could it be? Is there in Timaeus' account any other soul which could hold this function? Yes, there is. There is the world soul<sup>90</sup> and there are obviously – although Timaeus doesn't speak about them much, nor does he clarify their relationship to the world soul – also the souls of the heavenly bodies: of the planets as well as of the fixed stars each of which is a living being<sup>91</sup> endowed with a thinking soul.<sup>92</sup> The life of plants growing up from the Earth, with their organized – i.e., once again, basically circular<sup>93</sup> – movements, seems to spring from the movements of the soul animating the Earth. As if there might be a mortal kind of planetary soul in them. As if the plants – indeed, the whole of vegetation – might be a mortal offspring of the immortal soul of the Earth. After all, is not man himself, as a living being, also a mortal offspring of an immortal soul – actually a sort of plant turned upside down, rooted as it is not in the earth, but in the heaven where his immortal soul comes from?<sup>94\*</sup>

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<sup>88</sup> *Tim.* 77C3–5: μόνιμον δὲ καὶ κατερριζωμένον.

<sup>89</sup> *Tim.* 77B6–7: πάσχον γὰρ διατελεῖ πάντα.

<sup>90</sup> Defined as self-moving in 37B5.

<sup>91</sup> *Tim.* 38E5–6: δεσμοῖς τε ἐμψύχοις σώματα δεθέντα ζῶα ἐγενήθη (about the planets). 40B5: ζῶα θεῖα ὄντα καὶ ἀίδια (about fixed stars).

<sup>92</sup> *Tim.* 38E6: ἔμαθεν. 40B1: διανοοῦμένω.

<sup>93</sup> *Tim.* 77B7: στραφέντι δ' αὐτῷ ἐν ἑαυτῷ περὶ ἑαυτό.

<sup>94</sup> *Tim.* 90A5–B1 and 41D8–42B1. Cf. the contribution of Pavel Gregorić in this issue.

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