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### III

MICHAEL FREDE

## GALEN'S THEOLOGY<sup>1</sup>

Galen already in his life-time acquired a great reputation as a physician and a medical writer. He soon was to acquire the status of an authority in questions of medicine. But Galen thought of himself not just as a physician, but also as a philosopher. When he had turned fourteen, his father sent him to study with four philosophers in his native town, Pergamum, a Stoic who had been a student of Philopator, a Platonist who had been a student of Gaius, a Peripatetic who had studied with Aspasius, and finally an Epicurean who had come from Athens (*Aff. Dig.* 8, V 41,10-42,2 K). It was only when he had become sixteen that Galen's father, himself an architect with a strong interest in the mathematical sciences, prompted in this by "evident dreams" had him take up the study of medicine (*Ord. Lib. Prop.* 4, *Scripta min.* II p.88,13-17 Mueller = XIX 59,7-11 K; *MM* 9, 4, X 609,10 K). But it is clear from the wording in both of the passages just referred to that Galen, when he took up medicine, continued to study philosophy and that this was an interest which he actively pursued throughout his life. Thus he tells us that when he went to study in Smyrna (in 149, after the death of his father), he did so to follow the lectures of Pelops in medicine and those of the Platonist Albinus (another student of

<sup>1</sup> In writing this I have been greatly helped by the work of Pierluigi DONINI, in particular his article "Motivi filosofici in Galeno", in *PP* 35 (1980), 333-370. I would also like to thank Elaine Matthews for her generous help with the evidence from inscriptions concerning Galen's father Nico.

Gaius) in philosophy (*Lib. Prop.* 2, *Scripta min.* II p.97,9-11 = XIX 16,8-10 K). Indeed, he wrote a great number of treatises on philosophical questions, most of which, unfortunately, have been lost. But we get a good idea of the extent and the scope of Galen's philosophical writing from his *De libris propriis*, in which chapters 11 to 16 are devoted to his philosophical works. He even managed to acquire a certain reputation as a philosopher. Already Alexander of Aphrodisias, his younger contemporary, refers to him (*In Top.* 8, 5, CAG II 2, p.549,23 Wallies), and so do Themistius, Simplicius (cf. *In Ph.* 7, 1, CAG X, p.1039,13 ff.), and Philoponus (cf., in particular, the latter's *De aeternitate mundi* 17, 5, p.599,23 ff. Rabe).

In trying to characterize Galen's philosophical position in general, we should start from the fact that Galen, following the advice of his father, refuses to commit himself to the whole of the doctrine of any one philosopher or philosophical school (*Aff. Dig.* 8, V 42,6-43,8 K). This, presumably, is why his father made him attend the lectures of representatives of all four major philosophical schools. It seems to be in important ways the same attitude which he adopts in medicine and which in *De libris propriis* 1 (*Scripta min.* II p.95,2-10 Mueller = XIX 13,12-14,1 K) he characterizes in the following way: he does not regard himself as a Hippocratean or a Praxagorean or as a member of any sect (ἀίρεσις). He rather selects (ἐκλέγειν) from each group what seems to him to be fitting. But, he says, this selective or eclectic attitude does not prevent one from having particular admiration for some ancient author or authors. At this point, unfortunately, the text becomes corrupt; but we will hardly go amiss if we assume that Galen is saying something to the effect that he regards Hippocrates as a classical paradigm of a physician. Analogously, then, Galen also in philosophy, to use his own language, is eclectic, rather than an unwavering and unquestioning partisan of any one philosopher or any one philosophical school. But this does not prevent Galen from regarding some ancient philosopher or other as deserving our

particular attention or admiration, just as Galen's eclecticism in medicine does not prevent him from regarding Hippocrates as a model.

It seems to me to be obvious that it is Plato who for Galen plays the role in philosophy which Hippocrates plays for him in medicine. This is why he writes the *De placitis Hippocratis et Platonis*. Indeed, he speaks of the philosopher as "the most divine Plato" (*PHP* 9, 9, 3, p.598,9 De Lacy = V 792,4 K; *UP* 16, 1, II p.377,14-15 Helmreich = IV 266,3-4 K). Very clearly Galen also is much indebted to Aristotle, but Aristotle for him does not seem to have the status he attributes to Plato. In general his philosophical views are along Platonist lines. In his indebtedness to Aristotle he does not differ from most Platonists of late antiquity who integrate a good deal of Aristotelian doctrine into their Platonism. His relation to Stoicism is more complex. Again, there is no doubt that Galen in fact is very much indebted to Stoicism, but the degree of his indebtedness is obscured by the fact that as a rule he refers to the Stoics in a critical manner. Also in this regard, though, Galen does not differ from many Platonists of late antiquity, for instance from Plotinus. But it would be a mistake to think that Galen, in spite of his claim not to belong to any philosophical school, in fact just is some kind of Platonist. What stands in the way of thinking this is his refusal to address and to answer a number of questions a Platonist in his day was expected to have an answer to. He, for instance, not only refuses to claim that the soul is immortal, as a Platonist is expected to do, he refuses to answer the question concerning the soul's immortality one way or the other.

This brings us to a second feature of Galen's philosophical position in general. Galen not only is eclectic in his philosophical views, he also is rather selective as to which questions he is prepared to express a view about. When Galen first studied philosophy, he reports *Lib.Prop.* 11 (*Scripta min.* II p.116,20 ff. = XIX 40,3 ff. K), he, as far as this had depended on his teachers,

would have become a Pyrrhonian, given the disagreements between the different schools, but often even among philosophers of the same school. What prevented him from becoming a Pyrrhonian was the conviction he had acquired when being taught geometry and arithmetic, mainly by his father, who in this followed a family tradition, that there is such a thing as conclusive proof, the sort of proof geometers support their claims by. In another place, *Aff. Dig.* 8 (V 42,4 ff. K), Galen tells us, again in connection with his father's sending him to attend the lectures of different philosophers, that his father, having himself been trained in geometry, arithmetic, architecture, and astronomy, was looking for teachers who supported their claims with proofs; he took the failure to do so to be the source of disagreement and controversy. Galen, then, is also looking for proof in philosophy. But when it comes to questions of which Galen thinks that there is no evident answer to them, he becomes very hesitant. Even here, though, he is making a distinction. In *Foet. Form.* 6 (IV 699,7-700,6 K) he states that he is unable to say what the οὐσία of that soul is which might be thought to be the cause of the formation of the foetus, and that he hence also is unable to identify the cause which is responsible for giving the foetus the form which will be so marvellously suited to the needs of the animal. It is not only that he has not been able to find a scientific proof as to what the οὐσία of the soul consists in, he has not even been able to arrive at a plausible (πιθανόν) answer (700,2-5). For the answers which are on offer there not only is no proof, they are not even plausible. Some lines further down in the same text (700,17-701,6) Galen criticizes the view of one of his Platonist teachers. He had claimed that it is the world-soul which is responsible for the formation of the foetus of animals. Galen finds this not even plausible, because it borders on blasphemy to assume that the world-soul would concern itself with the formation of creatures like scorpions.

Earlier in the same chapter of the treatise (695,3 ff.) Galen reports how he turned to philosophers, who make it their business

to discuss the world-order and the coming into being of things, to find out from them what it is that causes the artful formation of the organism. He was expecting to get an answer in the form of a proof *more geometrico*, but got conflicting accounts, none of which even met the demands of rhetorical plausibility (695,10-11). These answers often not only are not definitive, they do not even seem to be possible answers, given that there is something which seems to rule them out (696,14 ff.). So Galen does distinguish between definitive answers, backed up by conclusive proof, and answers which, though not supported by proof, are supported by reasonable argument and are not ruled out by considerations to the contrary. Galen allows himself such plausible views, but is hesitant to express them.

Galen also seems to think that all philosophical inquiry should serve a practical end (*PHP* 9, 7, 11, p.588,18-20 De Lacy = V 780,13-16 K: *πρακτικὸν ... τὸ τέλος*), this is to say that it should aim at gaining a better understanding of things which will allow us to live a better life. I infer this, for instance, from the fact that in the passage from *PHP* referred to, Galen seems to distinguish between philosophers who pursue theoretical knowledge for its own sake and those who pursue it to the extent that it is necessary for a good life, to then criticize some of the latter for sliding from the pursuit of useful questions into pursuing useless questions. The primary objection in the latter case does not seem to be that they are inconsistent in claiming that philosophy serves a practical end and in, at the same time, pursuing practically useless questions, but rather that they have allowed themselves to pursue useless questions at all, having been taken in by the similarity between certain useful questions they were pursuing and certain related, but useless questions. It is only thus deceived by similarity that they pursue questions of a kind such that we are no better off for knowing the answer to them.

If we now look at Galen's extant philosophical writings and at what we can find out about his lost writings in philosophy,

for instance on the basis of his own *De libris propriis*, it is clear that his interest in philosophy was very much focussed on logic and on ethics. Thus his account of his philosophical writings in *De libris propriis* is divided into a long section on logic or dialectic dealing with books useful for learning how to demonstrate things (chap. 11), a section on ethics (chap.12), and chapters (13-16) dealing with writings pertaining to Platonic, Aristotelian, Stoic, and Epicurean philosophy. The writings in this last section, too, are almost all devoted to logic or to ethics. Galen seems to have written almost nothing on physics or theoretical philosophy. This is particularly striking, if one has any temptation to think, not just that Galen believed that medical practice should be based, as far as possible, on a solid scientific medical theory, but also would like to think that a solid medical theory has to be firmly based on natural science, i.e. physics in the ancient sense. But I take it that the reason why Galen is hesitant to write about physics or theoretical philosophy is at least twofold: he thinks that for the most part physics is useless, and that for the most part it is theoretical in the sense of 'speculative', since the available evidence does not suffice to settle many of the questions raised in a definitive way. But I will later also want to suggest that part of Galen's hesitation about theoretical philosophy or physics is religious in nature. It is not just that Galen, as we saw a moment ago, criticizes a view about the formation of the foetus as almost blasphemous, because it conflicts with his elated view of the world-soul. He also seems to think that the way the world is ordered, including the way living beings come into being and pass away and the way they are formed, reveals a divine power or divine powers at work, though we do not know how they are involved in bringing about the effects we observe, for instance an organism with a certain structure. It is as if they were hidden from us, some kind of mystery. There is at least one passage in Galen, in the *De usu partium* 15, 1, in which Galen talks as if it were impious to inquire into how certain bodily parts actually come to be formed the way we can perceive them to be formed. In this text Galen turns to the

discussion of the penis. Given its function, it has to satisfy certain requirements: it must be hollow, and it must, at the appropriate time, be hard, but should not always be hard. He explains in some detail the construction problems involved. Parts like arteries, veins, sinews, nerves, bones, flesh would not serve the purpose. Galen argues that the penis is a bodily part without parallel in its construction. What it is like we find out by anatomy. Hence we can see how the Demiurge wanted it to be so that it would fulfil its function (II p.342,4-5 Helmreich). But then Galen continues "do not try, do not dare to inquire how it came to be this way. For, of what you would not even know that it was this way, if you had not learnt it from anatomy, how could you reasonably dare to inquire how it came about. It is sufficient for you to have found out that every part has been formed in such a way as its use demands. But if you try to inquire how it came to be this way, you will be found to be not only insensitive to your own weakness, but also to the power of the Demiurge". Here, it seems that what is in question is not so much that the art of medicine would not be served by finding out how a bodily part comes to be formed with a certain structure, or that we for some trivial reason would not be able to find out what the answer is. There clearly is some suggestion of the inscrutability of nature's or the Demiurge's ways, of the impropriety of daring (τολμᾶν, II p.342,6 and 8) to inquire into things which it is not for human beings to know.

It is clear why he thinks that ethics or practical philosophy is useful. As to logic or dialectic it is mainly useful because it teaches us how proofs have to be constructed; and we have already seen what importance Galen attributes to proof, in the mathematical sciences, in medicine, or in philosophy. But he also thinks that a lot of logical inquiry is useless. In *Lib.Prop.* 11 (*Scripta min.* II p.116,12-18 = XIX 39,14-40,1 K) he complains that many of the theorems in Stoic or Peripatetic logic he later found to be of no use for demonstration. Similarly in *PHP* 9, 7, 16-18 (p.588,29-590,4 De Lacy = V 781,10-782,6 K) he



complains that, though logic is needed and necessary, many have extended their logical inquiries into areas the study of which is pointless. The same is even more true of physics or theoretical philosophy. A certain amount of physics is needed, for instance for medicine and for practical philosophy or ethics and politics (*PHP* 9, 7, 17). Thus, for instance, we do need to know in medicine that, as Plato says, the human body is a composite of earth, fire, air, and water, and that diseases are due to a deficiency or an excess of one or more of these or to their displacement (*PHP* 8, 2, 21, p.494,22-25 De Lacy = V 667,3-6 K). Now Hippocrates, according to Galen, thinks that there is no need to inquire further, for instance into the nature of these elements and how they come to have their observable powers of, say, heating and cooling. For this art, medicine, is a practical art, and the pursuit of such questions is irrelevant to the practice of medicine. But Plato, as if he believed that theoretical philosophy was eminently worthwhile, insists on pursuing these questions, for instance questions about the constitution of the so-called elements (*PHP* 8, 3, 2-5, p.494,28-496,10 De Lacy = V 667,10-668,13 K). Galen goes on to point out that it is irrelevant for the present discussion whether or not Plato was right in his view about the constitution of the elements (*ibid.* 6), but does not refrain from finally quoting Plato himself to the effect that his account of fire is only a likely (εἰκῶς) account (*ibid.* 11). Galen clearly does think that physics in the sense in which it is pursued by philosophers for the most part is useless, and for the most part advances at best to likely or plausible conclusions. In *PHP* 9, 7, 9-16 (p.588,7-33 = V 779,16-781,15 K) Galen gives us a long list of questions pursued by natural or theoretical philosophers which are idle: whether there is something beyond this world, and if so, what sort of thing it is, whether the world is self-contained, whether there is more than one world, perhaps even a great number of them, whether this world is generated or ungenerated, whether, in case it has come into being, it was brought into being by a demiurgic God or by blind chance (*ibid.* 9-11). Or there are such questions as what the οὐσία of

the gods is, whether they are altogether incorporeal or whether, like us, they have bodies (*ibid.* 13). Not only does Galen think that there is no need to know the answer to such questions, he also thinks that in this view he is just following the position of Socrates and his followers like Xenophon and, indeed, Plato himself, who for this reason attributes the account of nature given in the *Timaeus* not to Socrates, but to Timaeus (*ibid.* 15-16). Not only is it not worthwhile to pursue such questions, but there is no definitive, accurate answer to them which everybody will agree on. The most one can hope to achieve in such matters is a plausible or probable account. This is how far Plato extends his account of *physiologia* in the *Timaeus*, and this is why he makes Timaeus in the dialogue at the beginning of his account (*Tim.* 29 c-d) say that we should not expect, when it comes to the gods and the generation of the universe, to get more than plausible answers to many of our questions (*PHP* 9, 9, 3-5, p.598,5-19 De Lacy = V 791,17-792,17 K). Somewhat earlier, in *PHP* 9, 6, 21-22 (p.576,27-578,4 De Lacy = V 766,7-767,3 K), Galen had explained why there is such widespread disagreement among philosophers. Many of the questions they deal with, and he explicitly refers to some of the questions listed above, cannot be settled by empirical evidence, the way medical questions can be. And Galen obviously also assumes that we cannot settle them *a priori*.

Galen, then, seems to take a rather dim view of what we can expect of physics as a science. In this view he believes himself to be just following Socrates and Plato. And when it comes to the probable account Plato offers in the *Timaeus*, it is clear from many passages in Galen that he is rather hesitant to even accept as probable some of the views Plato sets forth in his account.

With this we can, finally, turn to the task I have been allotted, namely to say something about Galen's theology. Theology, the way the term is understood in antiquity, is a matter of giving an account of God or the gods. But antiquity knew and

distinguished various sorts of account of the gods, and thus various sorts or senses of 'theology'. One distinction, which suits our purposes well, seems to have been common and is well-known through Augustine's report of Varro's version of it in *Civ.* 6, 5 (cf. 8, 1), namely the distinction into mythical, civic, and natural theology. There are the traditional myths or legends about the gods; there are the accounts of the gods which are presupposed by one's following the *πάτριος νόμος*, the established cults of one's community (cf. e.g., Sextus Empiricus, *PH* 1, 17 and 24; 3, 218; *Math.* 11, 49) and there are the accounts of God or the gods given by philosophers which are supposed to meet the standards of rationality any philosophical account is supposed to satisfy, accounts of a kind which will also be adopted, in some form or other, by a wider educated public, and in terms of which educated persons will try to understand the traditional myths, but also the public cults they participate in. It is in this last sense that philosophers like Aristotle (cf. *Met.* 5, 1, 1026 a 19), Cleanthes (Diog.Laert. 7, 41) or Proclus (cf. his *Elementatio theologica*) talk of theology as a philosophical discipline. And it is in this sense that I want to talk about Galen's theology. But I will also have something to say about Galen's religious beliefs, at least to the extent that this has some bearing on his theological views.

Galen's theology is not a subject scholars have had much to say about. There are many reasons for this. One simply is that at least the extant writings do not offer more than scattered remarks on theological questions. Galen did write a hypomnema on Aristotle's first unmoved mover (*Lib.Prop.* 14, *Scripta min.* II p.123,4-5 = XIX 47,6 K). But unfortunately this treatise, though translated into Syriac and into Arabic (cf. R. Degen, "Galen im Syrischen", in *Galen. Problems and Prospects*, ed. by V. Nutton [London 1981], 158, Nr.118) has been lost. There seems to be at least one fragment of it preserved in Arabic, though. In it Galen talks about the followers of Moses and Christ who are taught to accept everything on faith (cf. R. Walzer, *Galen*

*on Jews and Christians* [Oxford 1949], 15). There is a question as to whether, as has been suggested, this can be the treatise attacked in a writing attributed to Alexander of Aphrodisias and edited by N. Rescher and M. Marmura (*The Refutation by Alexander of Aphrodisias of Galen's Treatise on the Theory of Motion* [Islamabad, s.d. (1966)]). For in this text the author criticizes Galen for attacking, in an essay sent to Herminus, Aristotle's claim at the beginning of *Ph.* 7, 1, 241 b 34-242 a 49, that everything which is in motion is moved by something. Now Aristotle's claim seems to be directed against Plato's assumption that the soul is self-moving (cf. *Phaedr.* 245 d 7-8). Having produced an argument for this claim, Aristotle proceeds (242 a 49 ff.) to argue that if something is in motion there ultimately must be some first mover which is not itself in motion. So Galen in the lost treatise on Aristotle's first unmoved mover may have been attacking this argument for a first unmoved mover by criticizing the claim that everything which is in motion is moved by something, and Alexander's response would be a response to this criticism. If, then, the treatise attributed to Alexander were a response to Galen's *On the first unmoved mover*, we would have a number of further fragments and would know a good deal more about Galen's treatise. But, given at least the focus of Alexander's criticism, this further information does little to help us to understand Galen's theology. What we would learn from it would just be that Galen thinks that Aristotle does not have a proof for his doctrine of a first unmoved mover. And so I am not going to pursue this text any further. We might, though, in passing take note of the fact that the author, perhaps Alexander, characterizes (p.16) Galen as somebody who in general inclines towards Plato (rather than Aristotle, we have to understand), but also as somebody who, at least in this context, was prepared to make abusive remarks about Aristotle's argument (p.18).

As things stand, then, all we have to go on to reconstruct Galen's theology are some remarks here and there in his extant writings, remarks moreover which are not easily fitted into a reasonably detailed, systematic view of Galen's theology. In fact

given what we have said earlier about Galen's attitude towards theoretical philosophy or physics in general and certain theological questions, like the question concerning the nature of the gods, one might easily come to think that in the sense we are looking for there is no such thing as Galen's theology, that Galen rests content with the religious attitudes he has been raised in.

But this clearly is not the case. For if we again look at *PHP* 9, 7 we see that among the many questions pursued in theoretical philosophy or physics and which Galen regards as pointless, there is one which Galen exempts from this criticism, the question concerning providence and the gods (9, 7, 12, p.588,20-22 De Lacy = V 780,16-17 K). I take it that Galen has in mind that it really does matter whether we believe that there are gods and that they are provident. For he immediately goes on to say (*ibid.* 13) that it is better for all of us to inquire whether in the world there is something superior to man in power and wisdom, apparently presupposing that such a being would deserve to be called 'divine' or a 'god'. So inquiry into the existence of gods and their providence, according to Galen, is not useless. And obviously he also thinks that it does yield an answer, if properly pursued. Indeed, as we can see from *Plac.Prop.* 2, Galen believes himself to have not just a plausible or probable view concerning God's existence, but firm knowledge of it, though in the same chapter he again goes through a catalogue of questions concerning God or the gods to which he has no answer. For instance, he, here again, does not know what the οὐσία of God or the gods is, but also remarks that he cannot see what harm is supposed to arise from the fact that human beings do not know the answer to this question. As we will see later, Galen also believes himself to know that God is provident.

So Galen does have a view on some theological questions. Yet, one might still wonder whether Galen thinks that there is such a discipline as 'theology' and whether Galen himself has a

detailed theological position which we could try to reconstruct. There seems to be only one passage in the whole of Galen's work in which he uses the word 'theology', namely in *UP* 17, 1 (II p.447,23 Helmreich = IV 360,13 K). Galen says that what might at first seem to be a small matter, namely the study of the use of the parts, will turn out to be a true starting point (ἀρχή) for an accurate theology (θεολογίας ἀκριβοῦς), a matter much weightier and much worthier than the whole of the art of medicine. He goes on to say (II p.447,25-448,3 = IV 360,15-361,1 K) that the study of the use of the parts not only is helpful for the doctor, but much more so for the philosopher who, after all, is trying to gain knowledge of the whole of nature, as opposed to the doctor who is concerned with just the human body. Here Galen does seem to think of theology as a philosophical discipline, a discipline one will pursue if one tries to understand the whole of nature. After all, whether we follow Plato, Aristotle, or the Stoics, God is a principle of nature. It also is clear from this passage that Galen does not think of theology as an entirely speculative enterprise. For he talks of an accurate (ἀκριβής) theology. We can gather at least part of the force of the characterization as 'accurate' by comparing *PHP* 9, 9, 5 (p.598,14-19 De Lacy = V 792,10-17 K). There Galen quotes Timaeus in the dialogue as saying that it is unreasonable to expect him to provide accurate (ἀπηκριβωμένους) accounts on all matters concerning the gods and the generation of the universe, if all he can give is an overall plausible account. So part of the point here in *UP* must be that theology, properly pursued, can provide definitive answers to at least some questions. To be properly pursued it needs to have the right starting-points, unquestionable truths. Such truths, Galen obviously thinks, are provided by the study of the use of the parts of the human body. The facts ascertained in this study show that there must be a Demiurge and that he is provident, but also a number of other things about God. So we do have firmly established theorems about the Demiurge. How they can be derived, Galen tries to show, or at least to indicate, in the course of the *UP*, but in

particular in *UP* 17, 1 where he explicitly talks about theology. But earlier in this same chapter Galen also expresses some views which he himself qualifies as only plausible or probable. So in this sense there clearly is such a thing as Galen's theology, though some of his theological views are qualified by himself as merely plausible or reasonable.

In what follows I will try to work out what this Galenic theology amounts to. But before I turn to this, I want to return in considerable detail to *Plac. Prop.* 2. I hope that this will help us to get a firm grasp of the background and of some of the details of Galen's theology.

In the *De placitis propriis* Galen tells us what his position on various controversial questions is. To some questions Galen believes himself to have a definitive answer, to other questions he does not know the answer, though in some of these cases he is willing to make a conjecture (14, 4). After a prefatory first chapter he in chapter 2 begins with questions concerning the world, to then mainly deal with questions concerning God or the gods. Chapter 3 deals with questions concerning the soul, chapter 4, after an initial sentence about celestial bodies, treats of questions concerning the constitution of terrestrial bodies. From chapter 5 onwards we deal with more specific questions concerning the body, the way it functions, and hence also about the soul. There is a certain pattern to chapters 2, 3, and 4 which deal with, as it were, global questions. In chapter 2 Galen claims to know that there are gods, or at least that there is a Demiurge. He knows this on the basis of experience, his own and that of others. For what can be observed by us unequivocally indicates a Demiurge at work. But he disclaims any knowledge of the οὐσία of God or the gods. By this he means, I take it, that he does not know who or what sort of thing God is, what is constitutive of God, what it is that reveals itself in its operations or effects which we can observe. In chapter 3 Galen claims to know that there are souls. We know this because we observe animals

to move in a certain characteristic way and to perceive things. And we just call that which makes them move in this way and perceive things, whatever it is, 'soul'. So there are souls. But Galen disclaims any knowledge of what the soul really is, of what it is that makes animals move in this way and perceive things. When in chapter 4 Galen turns to terrestrial bodies, by contrast, he claims that he does know what they are: they are mixtures of fire, earth, water, and air. It is not just that we can observe the effect a terrestrial body has on another body, for instance the effect a drug has on a patient. In this case we also are not entirely at a loss as to what it really is which has this effect. It is a body which is produced by the mixture of the four elements with their characteristic observable qualities.

But before Galen turns to terrestrial bodies, he in the first sentence of the chapter, in a subordinate clause, explains why he passes over the celestial bodies: he disclaims any knowledge of them. This is a rather summary and at least in one regard surprising claim. It is rather summary because surely Galen does know something about the celestial bodies, for instance that they do exist. For we plainly see them. It is somewhat surprising, given that Galen had a particular interest in the mathematical sciences, that his father had had a special interest in astronomy, and that, hence, Galen must have known something about astronomy. We will have reason to return to his astronomy later. For the moment I am interested in what Galen may have thought he did not know about the stars. Given the way the clause about the celestial bodies is incorporated into the sentence about terrestrial bodies, it is tempting to think that one thing he claims ignorance about is their constitution, their *οὐσία*; whereas he does know that terrestrial bodies are formed by a mixture of the four elements and he thus, to some extent, can understand the effect they have, he does not know what the constitution of the stars is, what their *οὐσία* is. There is, e.g., the question whether their body is immaterial in the sense that it is not constituted by the four elements, from which all mortal,



sublunary bodies are formed, but by a substance *sui generis*. In the latter case they are perhaps eternal, since they do not decompose into the four elements. Whereas the formation of mortal terrestrial bodies is part of the διακόσμησις for which the Demiurge is responsible, it emerges from a passage in *UP* 3, 10 (I p.176,21-24 Helmreich = III 241,1-3 K) that Galen assumes that celestial bodies like the sun are precosmic in the sense that they themselves, as opposed to their position, are not part of the way the world is ordered by the Demiurge. That is to say, they are the bodies they are, with a certain shape and size, independently of the order imposed by the Demiurge. There are all sorts of questions Galen may have about the stars and their motion, for instance whether they have a soul, what the origin of their soul is, and what the role of their soul in their motion is. But what matters for the moment is that Galen, though he does not explicitly say so, seems to think also of the stars as beings of whose existence we do know by observation, but whose οὐσία we are unable to determine, as a result of which we also cannot definitively answer certain questions about them. We only seem to begin to be on safe ground cognitively once we deal with the terrestrial objects surrounding us. But even here our understanding is severely limited. We know that terrestrial bodies are formed from a complete mixture of earth, fire, air, and water. But, when it comes to the question what earth, fire, air, and water really are, whether they are really elements or whether they, as Plato suggested in the *Timaeus* 48 b 3-e 1, can be reduced to more basic items. Galen avoids answering it (*PHP* 8, 3). Galen also claims not to know what total mixture amounts to, whether it only involves the mixture of the qualities or also of the matter. He sometimes claims that human beings are unable to effect a total mixture, since this requires a divine power (*Temp.* 1, 9, p.34,5-15 Helmreich = I 562,15-563,9 K).

With this we can turn to the details of chapter 2 of the *De placitis propriis*. Unfortunately this text is only extant in a Latin

and in a Hebrew version. Each of them depends on an Arab version. So in both cases we are at least twice removed from a Greek copy of the original text. Correspondingly there are important divergences between the two extant versions. In a crucial place the Latin text clearly is corrupt (2, 2, p.58,8-9 Nutton).

The text, as it stands, does refer to God, the creator or demiurge of all the things in this world (cf. 2, 1, p.56,17 & 23; 2, 2, p.58,8), the power of God (cf. 2, 1, p.56,20; 2, 2, p.58,9 & 15), the powers of God (cf. 2, 1, p.56,21), and certain workings or works of God or his powers, referred to as *operationes* (God: 2, 2, p.58,7; his powers: 2, 1, p.56,22; 2, 2, p.58,5). The original text also may have referred to gods. The text on either version says something like this (2, 2, p.58,1-2): "I will not talk the way Protagoras did who denied that he had any knowledge about them (*de ipsis*)". The plural pronoun could refer back to the divine powers mentioned in 56,21 or the workings of these powers mentioned in the same line. The pronoun also seems to be taken up by the feminine plural pronouns *earum*, *ipsae*, *earum*, *ipsis* in 2, 2, p.58,4-5. Since the text in 58,5 talks of "the workings of them (*earum*)", the reference of *ipsis* in 58,2 should be, not to the workings, but to the powers. But Protagoras did not talk about divine powers, let alone about their workings. What Protagoras notoriously said, as Galen must have known, was that he did not know anything about the gods, neither that they exist, nor that they do not exist, nor what sort of beings they are, and this is what Galen must be referring to here. Thus Nutton, in his comments on 2, 2, p.58,1-5 (p.135), rightly calls into question the use of the feminine pronouns in 58,2-5. As Nutton puts it, they seem to be "another example of the tendency of Arabic translators to avoid suspicions of polytheism". So we have to reckon with the possibility that Galen in 2, 2, p.58,1-2 had said "I will not talk the way Protagoras did when he denied any knowledge about the gods" and that in 58,4-5 he had used the appropriate masculine pronouns to refer back to the gods Protagoras had disclaimed any knowledge of. If we

adopt this view, the text not only talks of God whose *οὐσία* Galen does not know, but also of gods whose *οὐσία* he has no knowledge of, though he recognises their existence. That Galen believes in gods, but claims not to know their *οὐσία* we already know from *PHP* 9, 7, 13 (p.588,22-25 De Lacy = V 781,1-5 K). If we follow this suggestion, the references to divine powers in 2, 2, p.58,1-5 will disappear, but the change will leave the reference to divine powers in 2, 1, p.56,21 intact.

Now, one thing we would like to get clearer about is how God, the gods, the power of God, the divine powers, and the works or workings of God or the divine powers which we can observe are related to each other. This question arises, even if we do not follow the suggestion that Galen in the original text explicitly did refer to gods. It arises in the following way. Though there are serious problems with the text, it is clear that in 2, 2, p.58,7-11 Galen refers to the workings of God (58,8), the God referred to in 2, 1, p.56,23 and thus God, the Demiurge, referred to in 56,17 and 23. In the sentence in question Galen refers to the fact that he once was cured from a disease (2, 2, p.58,9-11). This, whatever the difficulties with the sentence may be, clearly is one of the works of God mentioned at the beginning of the sentence, something Galen himself has experienced. It is natural to assume, as also Nutton does, that Galen here is referring to the life-threatening illness he also talks about in *De libris propriis* 2 (*Scripta min.* II p.99,9-11 Mueller = XIX 19,1-3 K). There Galen is reporting how Marcus Aurelius asked him to accompany him on his campaign against the Marcomanni, but Galen managed to persuade the emperor to excuse him. Galen informed him that Asclepius, his *πάτριος θεός*, had told him not to join the emperor on his campaign, and that he had been a worshipper (*θεραπευτής*) of Asclepius, ever since the god had saved him (*διέσωσε*) from a terrible disease. The emperor, out of respect for the god (*προσκυνήσας τὸν θεόν*), ceded to Galen's request. Presumably the disease in question is the one Galen also is referring to in *Cur.Rat.Ven.Sect.* 23

(XI 314,18-315,7 K). There Galen tells us how he treated a condition he was suffering from, following two clear dreams sent by Asclepius, by arteriotomy. So Galen does seem to believe in gods like Asclepius.

What, then, is the relation between God and Asclepius, given that our sentence seems to ascribe Galen's cure, which he elsewhere attributes to Asclepius, to God. One possible answer would be that Galen just identifies Asclepius with God. As we learn from Aelius Aristides (*Or.* 42, 4), some Pergamenes did think that Asclepius was the ruler and saviour of the world. We will return to this later. But Galen in this text also seems to be talking about the gods in the plural. In any case he does so in other texts, for instance in *PHP* 9, 7, 12 (p.588,20-22 De Lacy = V 780,16-17 K). We naturally would assume that Galen distinguishes between God who is responsible for the ordering of the world and its governance and lesser gods or divine beings, and that Asclepius is one of these lesser gods.

Now it is obviously the case that the supporters of the cult of Asclepius over time managed to promote Asclepius to an ever more elevated status, first from a hero, the son of Apollo and a woman, to a god; he then came to be identified with Apollo himself; and now we see him promoted to be the ruler of the world, set over the lesser gods. It is somewhat difficult to believe that Galen, whatever his devotion to Asclepius and Pergamum, would accept such a view except as part of a more comprehensive view about the relation between God and the many gods. Such a comprehensive view we find, for instance, in a letter by Maximus, presumably one of Augustine's old teachers in Madaura, to Augustine, preserved among Augustine's letters (*Epist.* 16). Maximus thinks that all reasonable, educated persons should be able to agree that we all worship one God and Father whose powers pervade the world and who is invoked by many names referring to different aspects or, as it were, parts of him. This is a view on which all the lesser gods are somehow aspects

of the one God, such that in worshipping them we are worshipping God under one of his many names. Galen's view presumably is along these lines. But we would expect it to be more articulate.

There are two possibilities which come to mind. The simpler one is this: our text also refers to the power of God (2, 2, p.58,9) through which Galen was cured (cf. also the next sentence, 2, 2, p.58,14-16, which seems to refer to the same event or similar events). It obviously is part of the power of God to be able to cure persons and thus to save them, and more generally to save them from calamity or impending disaster. Thus Galen may identify Asclepius with God insofar as he has the power to cure and to save persons.

Analogously other gods might be identified with God insofar as it is part of his power to be able to bring about other things, insofar as he has other powers. But there also is a more complicated possibility: God has, as it were, agents who act in his name, under his authority, according to his will, with a power he has given them and which they exercise in his name. In this case Asclepius and other gods would be such agents of God. It still would be true that God cured Galen through his power, but it would be through an agent of God who effected the cure exercising the power given to him by God, namely Asclepius. At least for the time being we will have to leave open the question which of these possible views Galen might espouse, and hence how he sees the relation between God and the gods.

But whichever of these views we take to be Galen's, it seems clear that the marvellous power referred to in 58,15 is the power of God mentioned in 58,9 (cf. 58,8), and hence it seems plausible that the divine powers are the powers associated with, or even identified, with the gods. In fact, as the text of the Latin version stands, Galen in 2, 1, p.56,21 explicitly identifies the power of God with the powers we become aware of in our experience,

for instance the power Galen became aware of when he was cured. The Hebrew version in this place just talks of God and his powers (rather than his power) and identifies these powers as those we become aware of in observing the effects of their exercise. But it, too, later (cf. 2, 2, p.59,14 and 24-25) speaks of God's power, and hence it, too, implicitly seems to identify the power of God with these divine powers. Now the expression "God's power" is ambiguous. It might refer to God's overwhelming powerfulness, but it also might refer to his ability to do whatever it is that he does, that is to say to a specific, but unspecified, ability or power, the power which goes with being God, the power such that if something has this power it must be God, just as one might think that the soul has a particular, specific power. But whether "the power of God" refers to his powerfulness or to a specific power he has, we in either case would want to know what it is that he can do which makes him so powerful. Yet it might be the case that if we try to specify the power or the ability of God, we do not succeed, since we do not know how he actually goes about providing the world with its order. What we can do is to look for the effects of what he does in providing the world with its order. These are the works or workings of God. He, for instance, does cure persons from disease or saves them from ship-wreck (2, 2, p.58,7-14). Thus we attribute to him the power to heal and the power to save persons in calamity. The way we proceed is rather similar to the procedure Galen describes in chapter 14 of our treatise: we know that scammony produces purging and that medlar produces constipation. But we do not know how scammony and medlar produce these effects; we do not know what they do which has this effect, what causes the effect. And since we do not know the cause, we talk of the purgative power of scammony and the constipative power of medlar, after the effect they have. But what it is about scammony and medlar which has this effect we do not know (14, 1, p.110,19-22). Galen uses these examples to explain how we specify the powers of the soul. His explanation is not as straightforward as we might wish, because

in giving it he is mindful of the uncertainty as to what the soul is. We know that there is a soul, because the soul makes us do the things we as living beings do, like walk or run. But we do not know what it is, and hence also do not know what it does such that as a result of it we walk and run and do all the other things living beings do. Hence we introduce powers named after the observable effects of its activity, of its exercise of its power, for instance the natural powers associated with the vegetative soul: the attractive, the expulsive, the retentive, and the transformative powers (cf. *Plac.Prop.* 13, 7). In that sense, then, God's power is these divine powers.

A problem is raised by the phrase *scilicet deitas, id est virtus deitatis* in 2, 1, p.56,20. The Hebrew version has, in Nutton's translation, "namely God and the divine powers". The problem is threefold. To begin with, it is puzzling why Galen would need something like a *scilicet* clause at all, let alone one in this clumsy position. For it is perfectly clear without the clause that the subject of the two preceding indirect questions is God: Galen does not know whether he is corporeal or incorporeal and where he is located. So why should he add *scilicet deitas*? Secondly, there is the related question why the Latin version here uses *deitas* rather than *deus* (*deus* in 56,23 and 58,8). Are the two terms here used interchangeably, as they often are, or does *deitas* here have a special meaning? Thirdly, the Latin, but not the Hebrew version seems to identify God with his power. Nutton rightly notes that Galen never identifies God with his power or, for that matter, with the divine powers. Hence he considers deleting the reference to the divine power or the divine powers as being due to the familiar phenomenon of expansion in the process of translation (p.134; cf. also p.31). But it hardly solves the problem to consider *id est virtus deitatis* as due to expansion in translation. For now *illa* in the next sentence (56,21) will refer to *deitas*, and thus God again will be identified with his powers. Thus, if we assume that *id est virtus deitatis* does not correspond to anything in Galen's original text, we will also have

to assume that Galen's next sentence originally started like this "his are the powers whose ...", (*et illius sunt virtutes*), assuming a corruption of a pronoun in the genitive singular. Nutton himself in his translation deals with the problem by rendering *id est virtus deitatis* by "or rather the power of the deity". The force of the *id est* clause now would not be to identify God with the power of God, but rather to clarify or modify the question raised concerning God's location, explaining that this might be rather a question concerning God's power. Perhaps we could achieve the same result by translating "that is to say the power of God" or by translating "or, to be more precise, the power of God". Galen had said that he does not know whether God is corporeal or incorporeal. If God were a body, we could ask for his location. If God is incorporeal, there is a question as to whether he can have a location. But even in this case there might be a question as to the location of God's power.

Galen here in *Plac.Prop.* 7, 1 (p.76,25-78,5) expresses the view that, even if the soul were immortal and incorporeal, this would not rule out its inhabiting a body. In this sense it would have a location. And Galen certainly locates the faculties or powers of the soul in different parts of the body, for instance the natural faculty, that is the natural powers, in the liver. But it is far from clear whether what he considers as a possibility for the human soul, namely that it inhabits a body, though incorporeal, he also considers as a possibility for God, if he is incorporeal. And in any case, Galen, by parity of reasoning, must assume that, if the soul is incorporeal, it is not ruled out that it itself is not located in the body, though the faculties and powers he distinguishes are. Plotinus, indeed, in *Enn.* 4, 8, seems to take the view that the soul is not located in the body. He certainly says of the world-soul that it is not in the world, but governs the world by the presence in it of its least power (4, 8, 2, 33). It is clear, also from the language and the imagery, that Plotinus in this text is heavily influenced by Ps.Aristotle's *De mundo* or a closely related text, just as Alexander of Aphrodisias



is in *Quaestiones* 2, 3, a text to which we will return later. The author of *De mundo* in 398 b 1 ff. argues that just as it would not be fitting for the Great King to leave his palace to involve himself in the actual details of the διοικήσεις of his realm, it would be all the more unfitting for God to leave his place on high. He, instead, lets his power pervade the whole world and make the sun and the moon and the heaven move in the appropriate way. Here God himself is not in the world (and thus presumably incorporeal), but his power is in the whole of the world. Thus, to return to Galen, if God is incorporeal, the question of his location might turn into the question of the location of his power.

Now, even if Galen nowhere else does identify God with his power, it still remains a question whether Galen could identify God with his power. The answer, obviously, is that he could, if he had a certain conception of God, namely as something absolutely simple. In fact, some in antiquity took the view that the soul is the same with its powers, because its οὐσία is incomposite. This is the view Iamblichus ascribed to Plato (*ap. Stob. Ecl.* I p.367,11-14 W.). By contrast Iamblichus ascribed to the Stoics the view that the soul is a corporeal οὐσία to be distinguished from its powers which are qualities of this οὐσία (*ibid.* 17-21). Also for Galen the question arises in the case of the soul. But since he does not know what the οὐσία of the soul is, and hence does not know whether the soul is corporeal or incorporeal, but does specify the powers of the soul, he at least cannot have a definitive view as to whether the soul just is its powers. *A fortiori*, it seems to me, as long as it is a question for Galen whether God is corporeal or not, it cannot be his definitive view that God just is his power. In any case, just as Galen insists that we are aware of the power of the soul and hence know that there is a soul, though he does not know what the οὐσία of the soul is, what it really is that has this power, so he in our chapter also insists that he is aware of the power of God, but does not know what the οὐσία of God is, what it really is that has this power. Now it might be the case that God's οὐσία is such that he just

is his power. But as long as we do not know what his οὐσία is, we are not in a position to say that God is his power. Hence it would be strange, if Galen here identified God with his power.

With this we can turn to the second problem raised by the *scilicet* — clause, its use of *deitas*. *Deitas* in principle could be the translation of an Arabic word, distinct from the word for God, which would be used to render θεϊότης. Θεϊότης is extremely rare in pagan Greek, but it does occur, for instance, in Plutarch, *Quaest.conviv.* 4, 2, 2, 665 A, in Alcinous, *Didasc.* 10, p.164,33 Hermann, and in the *Corpus Hermeticum* 9, 1. The meaning is somewhat of a puzzle, but the Hermetic text sheds some light on it: God differs from the activity of the intellect. So ‘divinity’ or ‘deity’ would refer to what God does. This would also fit the Plutarch passage and a number of other texts. So ‘deity’ in this sense could be identified with the exercise of God’s power or even the power itself, especially if we assume that it is always exercised. The point of the *scilicet* clause now would be to modify the question about the location of God; it is supposed to be understood, if necessary, as a question as to the location of God’s activity in ordering the world. But there are three more occurrences of *deitas* in our text (2, 1, p.56,20; 2, 3, p.58,17 & 20). The three passages can all be given more or less tolerable sense, given this meaning of *deitas*, but in all of them we would rather expect Galen to talk of God. This leaves us with the first problem, as to why he used a *scilicet* clause at all. The answer, given the preceding discussion, should be that Galen is trying to make room for the possible answer that though God himself has no location, his power does.

There is one further point worth drawing attention to. Galen clearly and explicitly in this text talks of God’s power. But the Hebrew version, precisely in the place in which the Latin version is corrupt, explicitly talks of “his power and his providence” (2, 2, p.59,14). Even if Galen did not explicitly talk of providence in this passage, he clearly implicitly does. For he does talk about the purposeful structure of animals, the help we receive

in divination or through dreams, the signs God sends, his cures, his saving persons. All this clearly comes under the heading of providence. Now there is a question as to the nature of the providence Galen ascribes to the Demiurge, for instance in *UP*. This question has been caught up in the controversy as to whether Galen basically is a Platonist or a Peripatetic. Paul Moraux in particular has taken the latter view. Correspondingly he argues (for instance in *Der Aristotelismus bei den Griechen* II [Berlin 1984], 771 ff.) that Galen in his conception of providence follows a Peripatetic line, according to which divine providence only extends down to the sublunary sphere to the extent that it is responsible for the features living beings have in virtue of belonging to a species, that Galen nowhere indicates that God takes an interest in, say, the welfare of particular human beings. But it does seem to me that according to our passage God does take an interest in the welfare of particular human beings in particular circumstances. And this still is true, if it should turn out that God leaves it to divine agents to make the particular provisions his providence demands. In *UP* 10, 14 Galen explains how our visual apparatus is arranged in such a way that, though we have two eyes, we do not as a result see double; to the contrary, our visual power thus is doubled. To show the first requires some mathematics, and Galen here, afraid to put off his readers, as often also in other writings, had decided to pass the matter over. But a god (θεὸς δέ τις) told him to give an account also of this fact with all the mathematical apparatus required, as he then did (II p.110,7 Helmreich = III 837,5 K). Surely this god was concerned with what Galen was doing and made him do the right thing, thus showing providence for Galen and those who might read his work who would now encounter another impressive piece of evidence for the consummate art with which the body is constructed. And given that *Plac.Prop.* 2 seems to count such activities of the gods among the workings of God, it would seem clear that the providence of Galen's God does extend to individual human beings. Galen's view in this matter seems to be rather along Platonist lines.

In spite of all these difficulties the basic thought in chapter 2 of the *De placitis propriis* down to p.58,17 is reasonably clear. Galen does know that there is God. He does know this because of the workings of God which we can observe. They reveal a marvellous power which must be the power of God. But Galen does not know what the answer to some other questions about God is, to begin with the question what God really is, what it is that has this power. But, according to Galen we are none the worse off for not knowing what God's substance is.

Now this agnosticism (as it has been called) about God, and similarly about the world as a whole, about the soul, and about the celestial bodies, has been diagnosed by Moraux and others as revealing Galen's sound sense of the limitations of human knowledge and his aversion to idle speculation. I have no inclination to question this diagnosis. But if it is taken a step further by claiming that this agnosticism reveals scientific leanings on Galen's part who would rather give a natural explanation for everything than to have to refer to God, the soul, and the divine celestial bodies, I would disagree. It seems to me that the final lines of our chapter, 2, 3, p.58,17-21, reveal that Galen's preceding remarks, and in particular the agnostic remarks, do not just reflect a robust awareness of our cognitive limitations, but are equally a reflection of a religious attitude on Galen's part. Galen here says that he sees that in matters divine he should follow the law and accept Socrates' teaching. The reference to Socrates parallels the reference to Socrates in *PHP* 9, 7, 16 (p.588,29-33 De Lacy = V 781,10-15 K) at the end of a list of questions concerning the world and God almost all of which according to Galen it is useless to pursue.

For Socrates Galen gives Xenophon as his source. De Lacy in the *apparatus fontium* to *PHP* 9, 7, 16 refers to the *Memorabilia* 1, 1, 11-16. This reference is appropriate enough for the passage in *PHP*. But Nutton (*app.font.*) thinks that also our text refers to this passage. This seems doubtful since *Mem.* 1, 1, 11-16

does not explain the reference to a law in the Latin version and the corresponding "as ordained by religion" in the Hebrew. But there is another passage in the *Memorabilia*, 4, 3, 13 ff., in which Xenophon does have Socrates talk about a law and gives advice as to how one should treat the gods. The whole chapter 4, 3 is of such interest for our purposes that I summarise it in some detail. According to Xenophon Socrates tried to persuade people that what mattered most was soundness of mind, but in particular soundness of mind in regard to the gods. How Socrates went about this we are supposed to see from a discussion Socrates had with Euthydemus. It begins with a long catalogue of the ways in which the gods provide for us, indeed an account of how the whole world is arranged in such a way as to benefit us and to provide us with what we need. Part of this providential endowment is that we have been given perception, reason and language; and, if with all this we sometimes still do not know what prudence requires, the gods are prepared to assist us by means of divination (4, 3, 11-12). At the outset Euthydemus had confessed that so far he had given all this no thought, but as Socrates goes on to spell out how the gods care for us, Euthydemus quickly catches on, makes remarks to the effect that we should be thankful to the gods, but also points out that Socrates seems to be particularly dear to the gods, since they tell him what to do and what not to do (12). Socrates passes this remark over; instead he now exhorts Euthydemus not to wait till he sees the gods in their actual shape and form, but to venerate and to honour them just on the basis of seeing their works (ἔργα). The gods themselves seem to indicate that this is their will. For not just the other gods distribute their benefits without showing themselves in the open, even the god who orders and preserves the whole world, in his administering the world and doing the greatest deeds remains himself invisible; all we see is what he is doing. Even the sun does not allow people to see it precisely, but deprives those who shamelessly try to do so of their eye-sight. Even the servants of the gods, like thunder bolts and winds, are themselves invisible. And so is the soul,

which is divine, if anything about us is. She rules in us, but remains herself invisible. The conclusion Socrates draws is this (14): we ought to realize the power of the gods on the basis of what we see happening, and to honour the divine. At this point Euthydemus anxiously asks how he can appropriately thank the gods for all their care. Socrates assures him that the Delphic Apollo gives the answer: by following the law of the city. Socrates explains: the law of the city everywhere is to honour the gods as well as one can by *ἱερά*.

Now, I think, there can be little doubt that this is the passage Galen has in mind. Here is the law, and here is the precept Socrates gives as us to how one should be pious, to be sound of mind in regard to the gods. There are a great number of parallels in detail, for instance the detail that we have to content ourselves with seeing the works of the gods and worshipping them on the basis of this, without seeing the gods themselves, or the reference to the great power of the gods revealed to us in their works, or the reference to their boundless providence, the reference to divination, but also the reference to the god who rules the world and is responsible for its order. Galen's claim to know that God exists, but not to know his *οὐσία*, clearly is in the spirit of Xenophon's remarks. In fact, Galen in claiming this is giving expression to a religious view which must have been widespread among the educated in late antiquity and which we encounter in more or less the same words in Flavius Josephus, *Contra Apionem* 2, 117. According to Josephus Moses has taught the Jews to believe that God is one, known to us by his power, while it is unknown (or unknowable, ἀγνώστον) what he is like in his *οὐσία*. It would be a mistake to think that Josephus is referring to a specifically Jewish belief. This would undermine his purpose. He is responding to Apion's polemical attack on Jews and Judaism. Josephus' remark is meant to show that what Moses taught the Jews is what many, if not most, educated pagans in his day believed.

In fact, as we can even see in this very text, Galen himself tries to follow the law and Socrates' precept, though this here is

slightly obscured by Nutton's translation. Socrates teaches that we should honour the gods of the city as well as we can by *ἱερά*. In the Latin version the final lines of the chapter are introduced by *et video quod debeam praedicare*, rendered by Nutton as "and I see that I should declare... the law...". But what Galen seems to be saying is that he sees that he should praise God. Correspondingly the Hebrew version says "Therefore I thought that I should exalt and praise them <sc. the divine powers>" (p.59,28-29). If we turn to the *De usu partium*, we find Galen telling us in 3, 10 (I p.174,5-17 = III 237,9-238,3 K) that he is composing a true hymn on our creator. True piety, he says, does not consist in the sacrifice of many oxen or the burning of a fortune's worth of incense, but in grasping first oneself, and then expounding to others, the wisdom and the power and the goodness of the Demiurge. He characterises his treatise as a *ἱερός λόγος*. Galen presents the last book of *UP*, 17, as an epode, to be compared to the hymns to the gods the worshippers sing in front of the altar (17, 3, II p.451,19-27 = IV 365,13-366 K). Obviously Galen understands the injunction to honour the gods as well as one can by *ἱερά* as amounting in his case to writing something like the *De usu partium*. He tells us in *UP* 17, 1 (II p.448,3-8 = IV 361,1-5 K) that being introduced to the use of the parts constitutes an initiation into mysteries everybody should be introduced to, far superior to the Eleusinian or Samothracian mysteries. Obviously Galen has a certain understanding of what it is to be pious as well as one can, but there is no reason to doubt that he is serious in what he is saying, to suspect that all this is just literary form. Galen must have thought that those who expressed their piety in more conventional ways did so because in this way they honoured the gods as well as they could.

Now the injunction was more specifically to follow the law of the city, to worship the gods of the city according to established custom. And we have already seen that Galen refers to Asclepius as *ὁ πατριος θεός* and declares himself a worshipper of

the god (*Lib. Prop.* 2, *Scripta min.* II p.99,11 = XIX 19,3 K). So he also follows the injunction in this regard. But just as Galen has a conception of his own of what true piety consists in, what the appropriate sacrifice is, what the mysteries are which one should be initiated into, we might also wonder whether Galen had a conception of his own of Asclepius and of the worship appropriate for him. There has been a discussion as to what Galen is referring to when he calls himself a θεραπευτής of the god. Is this referring to a function of the cult of Asclepius, or to Galen's participation in the cult, or to worship in the sense in which the practice of medicine and the writing of medical books might be conceived of as worship (cf. F. Kudlien, "Galen's Religious Belief", in *Galen. Problems and Prospects*, ed. by V. Nutton [London 1981], 120-121)?

But, before we turn to this, I want to briefly look at a passage in Macrobius' *Saturnalia*, the speech of Praetextatus. It sheds some light on the talk of powers in *Plac. Prop.* 2; though considerably later than Galen (around 430 A.D.), it reflects on how already in Galen's time educated persons may have thought of Asclepius and his relation to God. In this speech all gods are said to stand in a certain relation to Zeus who is identified with the sun (*Sat.* 1, 17, 2; 23, 1). This claim at the very outset (1, 17, 2) is qualified: it only holds for the gods within the world, thus leaving room for a God or gods who transcend this world. The unique position of the sun within this world is supposed to be due to the fact that the sun governs the stars which regulate our affairs here on earth, such that what happens around us down here is due to the sun (1, 17, 3). What precisely the relation between the gods and the sun is remains somewhat unclear, except that it is not outright identity. What is clear is that the different gods are associated with the different effects the sun has, directly or through the stars, on our affairs. These different effects are ascribed to different powers (*virtutes*) of the sun (1, 17, 4). Accordingly Asclepius is introduced in 1, 20, 1 as the power (*vis*) of the sun to heal. Already in 1, 17, 5 Apollo had



been presented as the power of the sun which is responsible for divination and healing. Hence in 1, 20, 4 Asclepius and Apollo are identified.

There are a good number of other late ancient texts which reveal a similar religious or theological view, associating the different gods with the various powers of the god who rules this world, powers we are aware of through their effects. But the immediate relevance of this text to Galen's *Plac. Prop.* 2 and his view of Asclepius should be clear. It clearly is not Galen's considered view that the Demiurge is the sun. Otherwise he could not say in *Plac. Prop.* 2 that he cannot answer the question whether the Creator is corporeal or not. We will later see that in *UP* it is his tentative view that the sun is not the Demiurge, but rather an instrument in his creation.

But it does look, as if Galen has to somehow identify Asclepius with the Divine power to heal and to send us signs or with that which has this power. This leaves open a considerable number of possibilities. One is that Galen identifies Asclepius with God insofar as he has this power. Another is that he identifies Asclepius with an instrument or an agent through whom God exercises this power or to whom God has given this power. Another is that Galen hypostasises this power, as Philo is tempted to hypostasize the power of God. But whichever possibility we choose, it will be the case that if Asclepius heals somebody, it will ultimately be God who heals the person.

Now there is no doubt that Asclepius played an important role in Galen's life. If we are right in assuming that Galen at the end of *Plac. Prop.* 2 refers to Xenophon's *Memorabilia* 4, 3, the law referred to in *Plac. Prop.* is the law of one's city which enjoins one in the first instance to worship the gods of the city, the ancestral gods. In the case of Pergamum, by Galen's time, Asclepius is one of the ancestral gods, perhaps the most important one in the life of the city. Galen, as we saw, refers to Asclepius as ὁ πατριος θεός. And we know from various passages in Galen

himself what an important role the god played in Galen's life. Galen's father had made him study medicine prompted by a dream. Galen thought that his life had been saved by a dream sent by the god. And Galen was willing to be guided by evident dreams not just in his life, but also in his medical practice.

But the question here is how Galen thought of Asclepius and what attitude he took towards him. F. Kudlien in his article "Galen's Religious Belief" (in *Galen. Problems and Prospects*, ed. by V. Nutton [London 1981], 117-130) on p.117 claims: "But I think that Galen's feelings towards at least one of the Greek gods — Asclepius — were more intimate, more personal ones. The demiurge god, as one may say with Grant, 'is nature', which in fact means a certain degree of abstraction. To state, however, that 'for Galen nature has taken the religious meaning that the gods formerly had' (Grant), is in my opinion an over-generalization". I am inclined to think that both Kudlien and Grant are wrong.

It is true, as we can see from *UP*, that Galen identified the Demiurge with nature. It is also true, as we can see from *UP*, that Galen thinks that many talk of nature in a vague, unreflected way as being responsible for natural phenomena. But it is not true that Galen himself has this vague, somewhat abstract notion of nature. It rather is the case that Galen thinks that what happens naturally or in nature is ultimately the work of the Demiurge. And this Demiurge is not some abstract principle. Though Galen cannot say what it is that is the Demiurge, it is the Demiurge of Plato's *Timaeus* who is responsible for the order of the world and for what happens in the world naturally, things we can observe and only explain by recourse to a Demiurge who, for instance, is good, just, wise, provident. It is this Demiurge whom Galen took to be the God worshipped, for instance, by the Jews, as we see in a famous passage in *UP* 11, 14, though Galen thinks that God is misconceived by the Jews. But there is not the slightest suggestion that he is misconceived by them,

because they think of him as a person. It is rather that they fail to acknowledge the rationality and the providence involved in the creation. As to Asclepius, it seems to me to be clear on the basis of the part of *Plac.Prop.* 2 which we have considered so far that Galen must think that he owes his cure by Asclepius to the Demiurge.

This becomes even clearer, if we are right in our interpretation of *Plac.Prop.* 2, 3 (p.58,17-18) *et video quod debeam praedicare*. This means something like "and I see that I should sing the praise of God". Galen obviously does think of God as the object of his praise and hence his worship. And he seems to think that in worshipping Asclepius, he is worshipping God, though it remains somewhat unclear how he understands the relation between Asclepius and God, except that the power of healing has its origins in God.

At this point it may be relevant to refer to the fact that at least some of Galen's fellow citizens in his life-time, and among them some of the more educated citizens, also had their own views about the relation between Asclepius and Jupiter, and thus perhaps about the relation between Asclepius and God, the ruler of the world. For the new sanctuary of Asclepius which was built in Pergamum in Galen's youth was dedicated to Zeus Asklepios or to Zeus Soter Asklepios. It was erected by Rufinus who had become a Roman senator and then had retired in his home town after having served as consul. After him the new complex was called *Ῥουφίνιον ἄλσος*. Now Galen was not only perfectly aware of the fact that the new temple was dedicated to Zeus Asklepios, as we can see from *AA* 1, 2 (II 224,15 ff. K). Here Galen refers to Rufinus as the man who was building the new temple of Zeus Asklepios for the Pergamenes. Galen also must have known why the temple was dedicated to Zeus Asklepios. For it is likely that he knew Rufinus anyway. And he tells us that his teacher in medicine, Satyrus, was spending his fourth year in Pergamum staying with Rufinus. In any case, Aelius Aristides, a

friend of Rufinus and somebody Galen also will have known, tells us (*Or.* 42, 4): "The powers of Asklepios are great and many; or rather all powers are his... And it is precisely because of this that the people here [*sc.* in Pergamum] erected a temple for Zeus Asklepios". Aristides adds that if his teacher is to be relied upon in this regard, Asclepius is the ruler and the saviour (σωτήρ) of the world. He notes, though, that some say that Asklepios is the son of Apollon and hence the grandson of Zeus. This will have been a traditional view in Pergamum. But if we follow Aelius Aristides Rufinus and his friends not just identified Asklepios with Zeus insofar as he has, or is the source of, the power of healing or of sending signs, but took the further step of simply identifying Asklepios with Zeus by attributing all power and the rule over this world to Asklepios. We can only speculate whether some of them identified Zeus in turn with the sun. In this context it should be noted that of the large number of votive inscriptions found in Pergamum there is at least one (nr.63, *Altertümer von Pergamon*, VIII 3: C. Habicht, *Die Inschriften des Asklepieions* [Berlin 1969], p.103) which is dedicated to Zeus Soter Asklepios. An Aemilius Sabinus and an Aemilius Herennianus offer thanks for having been saved in the Atlantic and from the barbarians. We also find three votive inscriptions dedicated to Zeus Asklepios in Epidaurus (*IG IV*<sup>2</sup> 1, 399, 470, 481) and one in Hermione (*IG IV* 692).

With this we can turn to the details of Galen's theology. Galen's talk in *UP* 17, 1 of an accurate theology makes it natural to proceed by discussing first those things Galen claims to know about God, to then turn to his more speculative views about God's ordering of the world. Galen in *UP* 17, 1 asserts that the study of the use of the parts will constitute a true or proper starting point for an accurate theology. What he seems to have in mind is this. If we study the use of the parts of human beings or of animals, especially of we advance to an anatomical study of the parts, we by observation ascertain certain facts. And

from these facts we can safely infer certain theological truths. We have a true or proper starting-point, because we base our inferences not on speculative assumptions or hypotheses, but on what we can observe to be the case, and hence on something that is evident. The sort of evidence Galen relies on is this. If we study a part of the body we can determine what use it serves. When we study the part more closely we see that it is constructed in such a way as not just to serve this use, but to serve it, all things considered, optimally. We may wonder whether this is manifest. But Galen believes he is able to show this. On the basis of this sort of evidence, and certainly on the basis of the evidence accumulated from the study of all the different parts, Galen thinks he can make certain inferences about God. For these inferences to yield conclusions which constitute an accurate theology, it also must be the case that the facts observed unequivocally indicate certain theological truths. It is not clear how, formally speaking, Galen thinks of these inferences. They seem to be a matter of indication (ἐνδειξις, cf. *UP* 17, 1, II p.447,20 = IV 360,10-11 K): we make an inference from something manifest to what we need to assume to explain it. In any case, Galen seems to assume that the manifest facts, either taken severally or jointly, allow for no other explanation than that there is a God and that there are certain things true about him. But Galen, of course, realizes that not everybody will grant him this. And so Galen, to judge from remarks he makes repeatedly, for instance in *UP* 17, 1, II p.446,3-7 (= IV 358,8-11 K), seems to think that any right-minded, reasonable, unbiased person in view of the stated facts about the use and the construction of the parts, will come to the conclusions he wants to draw. If, for instance, a person dogmatically clings to an atomist view of the world and with it to the claim that this world has come about by chance, this person will also resist Galen's theological views. But such a person, in Galen's opinion, is unreasonable. And Galen in *UP* goes out of his way to show in detail that it is quite unreasonable to assume that animals of the design we encounter could be the product of chance, but also to argue

that an atomist does not have the resources to explain the structure of animals, because atomism does not allow for the complete mixture of substances. Hence Galen feels entitled to draw his conclusions, because he believes he can show that those who resist them do so, because they make assumptions which are unfounded or even patently mistaken. Hence Galen has no qualms to speak of these theological conclusions as a matter of evident cognition (*UP* 15, 7, II p.364,22 = IV 248,9-10 K).

Galen does not say that the study of the use of the parts is the starting point, but a starting point, because, as we can see from *Plac.Prop.* 2, observations about the design of animals are not the only evidence available to us on which to base theological conclusions. There is also the order of the world in general, there are the cures, there is divination, there are persons saved from death. But Galen clearly thinks that the study of the parts provides particularly striking and uncontroversial evidence for the desired conclusions. Take the case of the young man in Smyrna, described in *UP* 8, 10 (I p.481,22-482,1 = III 664,3-8 K). The anterior ventricle of his heart was badly wounded, but he survived, by the will of God, it was thought. This, according to Galen, turns out to be right, but not quite in the way people will have thought. For Galen points out that the young man would not have had a chance to survive, if both ventricles had been wounded. On the other hand, it is the providential function of double organs that one continues to serve, if the other is affected. So in this sense the young man's survival was due to God's providence.

As we have seen already in *Plac.Prop.* 2, one inference Galen believes to be able to draw from the observable evidence is that of the existence of a Demiurge or God. This is an indirect inference from the overwhelming power and wisdom revealed, for instance, in the design of animals. There hence must be something, even if we cannot say what it is, which has this power or wisdom. What is presupposed by this argument, as I already

indicated, is another argument. Galen relies on the assumption that there are just two possibilities: either the world we live in is a world of atoms of some kind or another which by chance have come to form a world like ours, or it is a world formed by an agent of unimaginable wisdom and power. One reason why we can reject the former view is that material living beings presuppose the complete mixture of the elements, that is, as we might say, chemical compounds. Such compounds presuppose that the elements permeate each other completely, or that at least their characteristic qualities mix, in such a way as to give rise to a new kind of body with new properties of its own. This presupposes that the elements are continuous and hence infinitely divisible bodies, rather than discrete minimal bodies of some kind or other without any quality. Such discrete minimal bodies by definition cannot form a genuine mixture (κράσις or μίξις) or a compound with new qualities; they can only be juxtaposed to each other (παράθεσις), the way different kinds of flour when mixed will still not form a genuine compound, but a mass in which the small particles will be merely juxtaposed, but remain identifiable as particles of wheat, rye, or barley, however finely we grind them. Now Galen in *Temp.* 1, 9 (p.34,5-15 Helmreich = I 562,15-563,9 K) claims that only God or nature can produce a genuine complete mixture, whereas human beings can only produce something which looks like a mixture of the eye, but is not (for instance, in our terms, a suspension which looks like a solution). We can only act on things by contact from the outside, whereas God or nature can pervade matter and bring about from the inside a total change (*De causis pro-catarcticis* VII 81). This is not to deny that we can produce alloys, but just to say that the most we can do is to juxtapose two or more substances in such a way that they, under the appropriate conditions, because of a divine force in them, will form a genuine compound. Atoms, needless to say, can only act on each other by touch. They cannot pervade each other. Thus bodies cannot be formed from atoms, and their formation involves a power which is God's or comes from God.

This presupposed, Galen thinks that the evidence unequivocally shows that there is a God, that he is of an enormous power, that he is perfectly wise, that he is good, that he is just, that he is provident. I will not go into the details of how Galen thinks that all this is borne out by the evidence. I just want to note that, if Galen were right, his theology, though so far only consisting of a relatively short list of propositions, would be a considerable achievement. A measure of this is the fact that we learn from Sextus Empiricus (*PH* 3, 2-12) that the major issues among philosophers were the question whether God or gods exist and whether there is Divine providence. Galen would at least have settled these questions. Granting this, we might want to know how, on the basis of this list of propositions, we are going to proceed further in theology. Galen makes no suggestions about this. One has to wonder whether, given Galen's views, he would have been able to proceed much beyond such a list of propositions. This will become clearer, if we now turn to his theological speculations.

According to Galen we do know that there is a Demiurge who is responsible for the order of things in the world, for instance for the way human beings are constructed. We might find the claim that the construction of human beings is unequivocal evidence for the existence of God more persuasive, if it came accompanied by an explanation of how it is that God accounts for the structure of human beings, of how he brings it about that human beings have this structure. Given what has been said, it should be clear that Galen would not have much sympathy with this complaint, in fact may find it blasphemous. Nevertheless, he in the course of *UP*, but in particular in *UP* 17, 1 does make some tantalizingly vague remarks about what might be involved in such an account. Not surprisingly he tends to qualify these remarks with terms like "probable" (cf., e.g. 17, 1, II p.446,16 = IV 359,3 K).

Given the tradition in which Galen stands, it is not astonishing that Galen attributes a crucial role to the sun (*UP* 17, 1,



II p.446,15 and 447,8 ff. = IV 359,1-2 and 15 ff. K). After all the sun is responsible for the seasons, the seasonal changes, growth and decay, periodic generation and corruption. There would be no life on earth without the sun. In religious thought in late antiquity the sun increasingly takes a central place and tends to become the god which rules the world. But P.L. Donini ("Motivi filosofici in Galeno", in *PP* 35 [1980], 354) has drawn attention to a very important passage in *UP* 3, 10 (I p.176,13-177,23 = III 240,10-242,8 K) which rules out the possibility that Galen identifies the Demiurge with the planet. The passage is interesting for two reasons: it involves the claim that the sun does not have its position relative to the other planets, and thus to the earth, of its own, but receives it as part of the ordering of the world, and it gives the sun an astronomically 'unorthodox' position, namely as the middle or fourth planet. Galen says that the sun's being of the size and the sort (τοιούτῳ ... οἷος ...) it is due to itself, but its being positioned in this place of the world is the work of him who gives the world its order (τοῦ διακοσμοῦντος ἔργον). For the place the sun has is the best place for it in the world (I p.176,21-177,1 = III 241,1-5 K). For if it were placed lower, say in the place of the moon, everything around here would go up in flames. If it were placed in the place of some higher planet, the earth equally would be uninhabitable (I p.176,17-21 = III 240,14-17 K). So the orbit of the sun is not determined by the sun, but by the Demiurge. The Demiurge places it in an orbit with a view to the effects of the course of the sun on life on earth.

One implication of Galen's distinction between the two kinds of truths about the sun is that, when the sun is put on its orbit as part of the ordering of the world, it already exists as a body of a certain sort and size. Hence it, as a body of a certain kind, is not the result of God's ordering. In this sense it is precosmic. Hence, presumably, it is eternal. Now, what is true of the sun in this regard also is true of the stars in general. But it is rather more difficult to imagine that the Demiurge reduces a chaos to order which already involves well-formed bodies like the stars

than to envisage him giving shape to a pre-existing chaotic matter. So this is a further reason to think that Galen in fact must be thinking of the world and its order as eternal and correspondingly of the Demiurge as eternally creating and maintaining the order of things, by, for instance, creating ever new specimens of the various kinds of mortal things. And Galen also must be thinking that it is not literally true that the sun is put on its orbit by the Demiurge. It always has been on this orbit. But that it is on this orbit is, in a way not explained, due to the rule of the Demiurge.

But the passage is also interesting for another reason, because of the place it attributes to the sun in the order of the planets; it is placed in the middle, that is as the fourth of the seven planets. This is of significance in two regards. This is not the classical order we find in Plato, Eudoxus, or Aristotle, where the sequence is Moon, Sun, Venus, Mercury, Mars, Jupiter, Saturn, but one that did become the standard order later, namely Moon, Mercury, Venus, Sun, Mars, Jupiter, Saturn. This is attested first for Diogenes of Babylon, a student of Chrysippus (Cicero, *Div.* 2, 91). This order apparently is of Babylonian origin and presumably came to Greece before Diogenes. In thinking about this rather dramatic change in the order of the planets, it might be of some use to take account of a passage in Simplicius' *Commentary on Aristotle's Physics* 2, 2, CAG IX p.291,21-292,31 Diels (= Posidonius, Fr.18 Edelstein-Kidd). It quotes a text Simplicius has taken from Alexander's lost commentary in which Alexander quotes Geminus' *Epitome* of Posidonius' work or works on celestial phenomena. The point made is this. The phenomena of stellar, in particular planetary motion are compatible with any number of mathematical models or sets of hypotheses of the kind astronomers develop. In order to decide which of them is true one has to be a natural philosopher who knows about the οὐσία and the δύναμις of things, why it is better for things to be this way, and various other things which are not the concern of the mathematical astronomer. So, if one has some

view of the οὐσία of the sun, or at least of its δύναμις, and of why it is better for the sun to have the middle position, one might opt for the corresponding mathematical model. Now it seems that those who chose the middle position for the sun did so to do justice to what they thought was the elated position of the sun not just relative to what happens to things on earth, but also relative to the stars. The sun is the leader of the planets who accompany it on both sides. At least sometimes it seems to be thought that it governs or controls their motions. In any case the central position attributed to the sun now clearly reflects the crucial role attributed to it in the functioning of the kosmos as a whole.

We already vaguely begin to see how Galen imagines things to be. The Demiurge creates living bodies of a certain kind. But he does not directly involve himself in this. He rather brings it about that the sun moves in a certain way. And the sun controls the motion of the other planets. And the stars by their joint motion have an effect on life here on earth which is profound. In fact some would think that life here on earth is controlled by the motion of the planets. In fact Alexander of Aphrodisias (*Quaest.* 2, 3, *Suppl.Arist.* II 2, p.48,15 ff. Bruns) presents it as a common view that the divine body, that is the sun or more generally the heaven, by its motion communicates a power to the body adjacent to it, which is propagated all the way down to earth and is responsible not just for there being living beings, but even rational beings. It is something along these lines that also Galen seems to be thinking.

There is an intriguing parallel to this passage in Galen's *UP* 3, 10 about the way the Demiurge accounts for the path the sun takes in the hymn to the sun to be found on another inscription in Pergamum, published by H. Hepding (*MDAI [A]* 32 [1907], 356-360, inscription nr.115).<sup>2</sup> It is a votive offering by one "Aelius Nico, architect". It is of particular interest, since we

<sup>2</sup> Cf. on this also *Steinepigramme aus dem griechischen Osten* I, hrsg. von R. MERKELBACH und J. STAUBER (Stuttgart 1998), 605-607.

know from the *Suda* (*s.v.* Galenos) that Galen's father's name was "Nico". Moreover we know that Galen's father was an architect. Unfortunately we know from Pergamene inscriptions of two persons called "Nico", both architects, the other a "Julius Nicodemus, also called Nico". For both of them we have several inscriptions, and in both cases the date of the inscriptions would fit Galen's father; Aelius Nico has a slight edge, because, like Galen's father, he obviously is interested in numbers, in geometry, in fact stereometry, and in astronomy. But whether or not he is Galen's father, the hymn is of interest, since it reflects the view of an educated Pergamene citizen contemporary with Galen. Lines 2-4 are a somewhat unfortunate adaptation of Euripides' *Phoenissae* 3-5. They address Helios who sends his rays to mortal beings, fixes the course of the sun, but also (lines 5-6) sees to the orderly motion of earth, water, air, and fire. Obviously "Helios" in these lines does double duty. It once refers to the celestial visible body, but then also to something else which puts the sun on its orbit, very much like Galen's Demiurge. We are also reminded of the distinction Praetextatus makes between the sun and something higher than even the sun.

There are then two issues which we need to get clearer about. The first is how, according to Galen, the sun is crucially involved in maintaining the order of the world, in particular the sublunary world of generation and corruption. The second issue is what sort of thing, in Galen's mind, the Demiurge could possibly be and how he manages to make the sun move in the way it has to move, if it is to maintain the desirable order of the world. The first problem is very much like the problem Alexander of Aphrodisias is trying to deal with in *Quaest.* 2, 3. The treatise begins with the question what the power is which the divine and hence immortal body communicates by its motion to the body contiguous with it which is subject to generation and mortal. The question is pressing because it is thought that it is this power which is the cause of there being bodies with a soul, that is living beings, and thus also of human beings having a

rational soul. It is in this way that divine providence is thought to, for instance, have provided us with reason and an intellect (p.48,15-22 Bruns). The problem arises because we do not know whether this power communicated to the contiguous body is the very nature of this contiguous body, or, as it were, a second nature of it. It cannot be its very nature, because for there to be a contiguous body to which the heavenly body communicates this power, it already has to have its own nature to be an actual body. But if it is another nature added on to it, it does not seem to contribute anything to the perfection of the body, for instance the human being, because it as such already is rational (p.47,31-48,15 Bruns). Alexander then considers two views as to how the problem might be solved, of which presumably he favours the second. The first view is that the divine power is communicated to the simple bodies, the elements, but does not perfect them. They remain just what they are. But the power shows up in the composite bodies which result from the mixture of the elements. Their natures are the product not just of the natures of the elements, but also of the power communicated to them to different degrees, depending on their purity. It is thus that we get bodies which are alive or even intelligent (p.48,22-49,27 Bruns). On the second view we challenge the initial assumption that there already is an actual contiguous body to which a divine power is communicated. We assume that the power originating in the divine body is involved in the very formation of the elements and that it is the cause of their natures and powers. It is due to ever more complex mixtures of these bodies that we get bodies with highly complex and sophisticated powers which have, though, their source in the power which originates in the heavenly body (p.49,28-50,27 Bruns). There are several ideas Alexander here refers to, or even avails himself of, which seem to be widespread in his day, some of which also in some form or other are to be found in Ps. Aristotle's *De mundo*. There is the idea that living beings, including intelligent beings, are to be explained by appealing to a power, originating in a divine being, which spreads throughout the

world. There is a chain of propagation of this power. It is handed down by contact with the next link in the chain. As it is handed down it diminishes. Thus, if it is communicated to fire, fire hands it on to air, air to water, water to earth, but earth will have very little of it or will have it in a very attenuated form, because it is gross, while fire is pure and subtle.

It clearly is against this background that we have to look at Galen's very sketchy account in *UP* 17, 1. If we do, it becomes clear that Galen thinks that the crucial power which is handed down is the power of understanding, the intellect, or, as we might want to say later, the power of cognition. He has an argument to the effect that an intellect of enormous power resides in the heavenly bodies, that is the stars and in particular the sun. And then he tries to explain how this cognitive power is communicated downwards so as to be found also on earth. The reason why he tries to do this is only partly apparent from our text here; it will explain why there are intelligent beings here on earth, namely human beings. But I assume that Galen also is thinking of the fact that there are perceptive beings on earth, namely animals, and that the formation of living beings quite generally requires a certain understanding.

Galen, then, makes the assumption, which he takes to be plausible (*εἰκότως*), that a much better and sharper intellect resides in the sun, in the moon, and in the stars quite generally than in bodies on earth (17, 1, II p.446,16-19 = IV 359,2-6 K). His reason for thinking this is the following. Even in the filth down here on earth ("For what else shall we call what is composed of flesh, blood, phlegm, black and yellow bile?") we find beings which are highly rational with plenty of understanding, if we think of Plato, Aristotle, Hipparchus, or Archimedes (II p.446,23-447,7 = IV 359,9-17 K). But it is plausible to assume that the purer the material constitution of the body is, the more powerful the intellect will be which dwells in the body. But the material constitution of the celestial bodies, in particular the

sun, is a marvel in its beauty and hence, presumably, in its purity (II p.446,13-16 = IV 358,17-359,3 K). Hence the celestial bodies, in the first instance the sun, must have an extremely powerful intellect. Galen here is presupposing that the elements themselves are ranked according to purity in the following order: fire, air, water, earth, and that accordingly the bodies mixed from them are, depending on the proportion of the different elements in the mixture, more or less pure, terrestrial bodies being the most impure because of the large proportion of water and earth they contain. He may also assume that the elements themselves come in purer or less pure forms. In any case, the heavenly bodies will consist of particularly pure fire and hence will be the purest, first among them the sun. Thus the sun will be the most intelligent.

Galen's next task then is to explain how this power of understanding which the sun and the stars have is communicated to what is below and contiguous with them. This he tries to do in II p.447,8-12 (= IV 359,17-360,4 K). It seems to him (*δοκεῖ*) that a rather remarkable intellect also is to be found in the air which is between us and the celestial bodies and which envelops us. Galen tries to explain this in the following way: it cannot be the case that the air participates in the bright light (*αὐγή*) of the sun, but not its power. By "its power" Galen must be referring to the powerful intellect of the sun. For he is trying to explain why one should believe that there is an intellect in the air. Thus the thought must be that the air also must share in the intellectual power of the sun, though it receives it in a diminished form. This is why the intellect in the air is called only "not inconsiderable". This is in accord with the principle that the power of the intellect depends on the purity of the matter of the body in which the intellect dwells. Presumably there is a connection between the air's sharing in the light of the sun and its receiving from the sun a not inconsiderable power of understanding. For the air, due to the light of the sun, itself becomes light-like (*αὐγοειδής*), and this makes it, or allows it to be, intel-

ligent. We will pursue this further in a moment. So the sun due to its light fills the contiguous air with intellect or understanding. But the air which envelops us (II p.447,9-10 = IV 360,1-2 K) will pass this on to the terrestrial sphere. So an intellect of some power arrives even here on earth from the bodies above, though this is the impurest part of the world (II p.446,11-13; p.446,7-9 = IV 358,14-17; 358,11-13 K). One effect of this is that we get intelligent beings even here on earth (II p.446,23-447,7 = IV 359,9-15 K). But Galen also suggests that the intellect which arrives in the terrestrial sphere and spreads through it is responsible for the formation of animals quite generally (II p.446,7-11; 446,19-22 = IV 358,11-14; 359,6-9 K). He does this while saying at the same time that the formation of plants and animals in this filth reveals the power of the demiurgic intellect. So his view clearly is that the Demiurge does not directly create these plants and animals in this filth, but via a power which in a diminished form arrives on earth and which even in this diminished form produces such marvels. This, too, we need to pursue further by looking at other texts.

But before we do so, we have to assure ourselves that we are right in assuming that Galen wants to suggest that the power of the intellect quite literally is communicated to the terrestrial sphere via the air which is filled with the light of the sun. The way Moraux (*Der Aristotelismus bei den Griechen*, II 766) understands Galen's account, it involves a mere analogy. He says: "The activity of the celestial intellect extends down to the terrestrial world in such a way that this world participates in its power in a manner analogous to that in which the air surrounding us participates in the light of the sun." But it seems to me that Galen is trying to do more than merely to offer us an analogy. He is trying to explain why he thinks that the air is filled with intellect, and thus to explain how the terrestrial world shares in the power of the celestial intellect by sharing in the power of the intellect in the air. And there is an intellect in the air, because the air shares in the light of the sun. This is why



Galen says that it could not be the case that air shared in the light of the sun, but not in its intellectual power. That Galen assumes a close connection between intelligence or, more generally, cognition, and light, becomes clear if we look at the role light plays in Galen's doctrine of cognition.

Notoriously from Plato onwards down to late antiquity the *αὐγή* of the sun or of fire is referred to again and again in discussions of the soul and in particular of the cognitive powers of the soul. Thus Chrysippus, for instance, thought that the final state of total conflagration of the world consisted in a state of even distribution of fire in the form of *αὐγή* and that in this state the world had become a pure contemplative intellect. Platonists like Porphyry saw in the union of the sun's light and air an analogy to the union of soul and body. There is one place in Galen's doctrine in which a light-like substance plays a conspicuous role, namely in his theory of vision. This involves appeal to a certain kind of pneuma which Galen in *UP* sometimes calls "psychic" (7, 8, I p.394,6 = III 542,2 K), but more often *αὐγοειδές* or also *φωτοειδές* (8, 6, I p.464,14-19 = III 640,16-641,4 K; 10, 3, II p.66,2-5 = III 774,9-13 K; 16, 3, II p.384,16 = IV 275,12 K). It is produced in the ventricles of the brain, runs through the nerves which connect the eyes with the brain, and fills the eyes (*UP* 7, 8, I p.394,4-5 = III 541,18-542,1 K; 16, 3, II p.384,16-17 = IV 275,12-13 K). Hence also the eye is called *αὐγοειδές* (8, 6, I p.465,20 = III 642,10 K) or "the most light-like and the most sun-like" part of the body (*UP* 3, 10, I p.177,19-20 = III 242,3-5 K). Galen explains in *UP* 8, 6 (I 464,17-21 = III 641,2-6 K) why the organ of sight cannot be airy (*ἀερῶδες*), but must be pure and light-like, since otherwise we could not discriminate colours properly. It is in virtue of this psychic pneuma that we have the ability to see. Quite generally it seems to be his view that cognition presupposes psychic pneuma. It is then this pneuma which allows things to have cognition and some kind of understanding.

Against this background we can look at a passage in *PHP* 7, 7, 24-26 (p.474,20-29 De Lacy = V 643,9-644,3 K). Galen is criticizing the Stoic, the Epicurean, and, to some extent, the Aristotelian theory of vision. In his view the air surrounding us, when lit by the sun, is of the same character as the pneuma produced in the brain which allows the eyes to see (7, 7, 19, p.474,4-5 De Lacy = V 642,7-9 K). He claims that there is no difficulty in hypothesizing that the light ( $\alpha\upsilon\gamma\eta$ ) of the sun itself is perceptive, just as the pneuma in the eyes, which comes from the brain, being light-like ( $\phi\omega\tau\omicron\epsilon\iota\delta\acute{\epsilon}\varsigma$ ), is perceptive. I note in passing that it now should be clear why the air contiguous with the sun becomes intelligent, because it becomes light-like.

But to return to the *PHP* 7, 7 passage, at this point Galen brings in the soul. According to Galen there are two possibilities: either the soul is corporeal, in which case it is to be identified with this, as it were, light-like and ethereal ( $\alpha\iota\theta\epsilon\rho\tilde{\omega}\delta\epsilon\varsigma$ ) pneuma, which is the position, he thinks, the Stoics and Aristotle are driven to; or the soul is incorporeal, and in this case this light-like pneuma constitutes the vehicle ( $\delta\chi\eta\mu\alpha$ ) of the soul which it uses to communicate with the body. This, obviously, is a Platonist position. But Galen himself, notoriously, cannot make up his mind whether the soul is corporeal or incorporeal (cf. *Plac.Prop.* 3, 2, p.60,10-11).

With this in hand we can return to the account in *UP* 17, 1. We now understand how the sun by its light makes the air be endowed with a rational soul or an intellect. Air by itself, as we saw, according to Galen is not cognitive, not even perceptive. But by the light of the sun it becomes light-like. And now there are two possibilities, given that Galen does not want to commit himself to a view about the nature of the soul. If the soul is corporeal, the view will be that the sun by its light turns part of the air into light-like air and thus a soul in virtue of which the air has understanding. Or the soul is incorporeal. In this case the sun by its light turns part of the air into the appropriate vehicle for

a soul. Hence an incorporeal soul will enter it, and it will become intelligent in this way. Correspondingly the contiguity with this intelligent air must bring it about that on earth bodies are formed which contain or even also produce a lower grade psychic pneuma. In this way we get animals and human beings. And again the question arises whether the soul just is this psychic pneuma or whether it just is the vehicle, in which case an incorporeal soul will enter the body and make it have some understanding.

With this we can turn to the other question concerning *UP* 17, 1 which we had set aside. In this text Galen seems to me, as I said, not just to try to explain how even on earth we do have intelligent beings, but how quite generally animals are formed in such an intelligent way. What is more, even in slime and rotten plants and fruit animals are formed which reveal the intellect of the Demiurge (II p.446,19-22 = IV 359,6-9 K). It has been thought that this remark is in conflict with Galen's rejection later, in *Foet. Form.* 6 (IV 700,17-701,6 K), of the view of his Platonist teachers that it is the world-soul which is responsible for the formation of living beings. Galen rejects this view, because, though the world-soul clearly would dispose of the art and the power to do so, it would be blasphemous to think that the world-soul is concerned with the formation of such base creatures as scorpions, snakes, worms, and the like. I have already explained that there is no conflict, because, though it is the Demiurge who creates all these creatures, he does this through the power of understanding of something down here on earth. After all, we do have to remember that the Demiurge of the *Timaeus*, too, does not himself fashion the bodies of mortal creatures, but leaves this to the younger gods. An architect or master-builder who builds a house is not expected to get his own hands dirty, and the image of the Demiurge in the *Timaeus* clearly is that of a master-builder.

There must then be something down here on earth which has the understanding required for the formation of a foetus, in part

precisely to avoid the perceived blasphemy. At the same time this understanding must ultimately derive from the Demiurge, if the Demiurge is to be the creator of everything. Hence in *Foet. Form.* Galen considers the question whether the soul which is going to govern and to use the finished body is the very soul which forms the foetus, without being able to decide the question. But it is exactly because he, as we can see from *Foet. Form.*, is very concerned with the question whose understanding it is that is involved in the formation of animals, that in *UP* 17, 1 he wants to explain how an intellect, something with cognition, arrives on earth to take on this responsibility. Given that Galen, even in *Foet. Form.*, sees himself utterly unable to decide what it is that is responsible for the formation of a foetus, we should not expect more clarity or enlightenment from our brief sketch in *UP* 17, 1.

With this we can finally turn to the question what the Demiurge is who through the sun administers and maintains the world. It seems a hopeless task to even try to answer the question, given that Galen explicitly insists that he does not know what the Demiurge, or what the soul is, and hence presumably what the intellect is, nor whether they are corporeal or incorporeal. On the basis of *UP* we only have two clues: the Demiurge is not the sun, and the Demiurge is an intellect (II p.447,21 and 446,22 = IV 360,11-12 and 359,8-9 K). The number of possibilities is enormous. But I will let myself be guided by the fact that Galen clearly countenances that there is such a thing as the world-soul. It is an intellectual soul or an intellect. Like of any soul Galen can think of it as being either corporeal or incorporeal. If it is corporeal, it will be just a particularly pure form of fire, like Chrysippus' ἀύγή. And, if it is incorporeal, it might be outside the body, riding, as it were, on it like a vehicle, the way Plato in the *Timaeus*, 41 d-e, explains how the Demiurge fashions rational souls, equal in number to the stars which he then places (ἐμβιβάσας) one on each star as on a vehicle. So, if one assumed that Galen's Demiurge was the world-soul, this would leave open the possibility that it is an intellect which governs the

world from the outside, riding on it, as it were. Now there is one passage in Plato *Laws* 10, 895 e–899 d, which may be relevant to our purposes.

Galen knew the *Laws*. He wrote a *compendium* of them, presumably one of his eight *compendia* of Platonic dialogues he refers to in *Lib. Prop.* 13 (*Scripta min.* II p.122,13 Mueller = XIX 46,15 K). A fragment of it is extant in Maimonides (cf. *Galenii Compendium Timaei Platonis*, edd. P. Kraus et R. Walzer [London 1951], 100–101). The relevant part of the text of *Leg.* 10 must have been well known in late antiquity. It is, for instance, excerpted at length in Eusebius (*PE* 12, 51, 4–34). Plato argues that all motion in the world has its source in the self-motion of some soul or other. There is one best soul, but the motions in the world presuppose a number of souls. The best and most perfect soul must be the one which moves the heaven with care and in perfect order (10, 898 c). We then turn to the motion of the sun, the moon, and the other stars (10, 898 d). We focus on the sun and ask how the soul moves it. There are three possibilities: (i) there is a soul inside the sun which moves it the way our soul moves us; (ii) the soul provides itself with a body of fire or some sort of air and, as some say, pushes with this body the body of the sun from the outside; or (iii) the soul remains without a body, but manages to lead the sun by some extraordinarily marvellous powers (898 e 8–899 a 4). We then are told that the soul, whichever of the three ways it moves the sun, brings light to all things and thus should be called a god (899 a 7–10). On the basis of this Plato goes on to argue that there are gods and that they are provident.

The way this text seems to me to be relevant is this. The most perfect soul which moves the heaven in the most perfect way, making it rotate around its axis, traditionally is identified with the world soul. And so this is also what Galen may be assuming. And he might identify it with the Demiurge. Now the soul of the sun makes it rotate around itself. But we also know from

the *Timaeus* that the sun by the world-soul is made to move in a circle along the ecliptic. It is in this way that she brings light to all. Thus Galen, identifying the world-soul with the Demiurge, can say in *UP* 3, 10 (I p.176,7 ff. = III 240,5 ff. K) that it is the Demiurge who is responsible for the beneficial effects of the sun for things on earth by making it move along the ecliptic at the right distance from the earth. We know how the story goes on from here. What Galen might find attractive about this account is that it involves a God who governs everything, including the sun, yet makes room for the central and divine role of the sun, that it emphasises the existence and the providence of God and the gods, and that it does not force him to decide on the nature of God or the soul and the intellect, respectively. If the Demiurge is the world-soul, Galen does not have to espouse the view, or to reject it, that the Demiurge is an immaterial intellect above the world of the kind Aristotle envisaged in the *Metaphysics*.

This, then, as far as I can make out, is Galen's theology. It is not surprising that it does not seem to have left an impact on later theological thought. It stays comfortably within the limits of what an educated person in Galen's time would have been ready to accept. Given his methodological principles, but also, I submit, his religious attitude, Galen does not allow himself to be drawn into developing a positive view on some of the issues which were of most concern to philosophers, like the nature of this world, of God, of the soul or the intellect, or of the stars. But to some extent one also is left with the feeling that Galen found it much easier to criticize the theological speculations of philosophers than to put his own mind positively to the resolution of some of the questions involved which crucially interested him, like the formation of the foetus or, more basically, the total mixture of elements. He, after all, did assume that the mixture does require a Divine power. On the positive side, the belief in God's providence clearly not just proved to be a fruitful heuristic principle for his study of the use of the parts of the

body, but this study in turn helped to give a clear content to the ascription of such predicates as 'good', 'wise', 'just', 'provident', 'powerful', to God, which they often do not seem to have.

## DISCUSSION

*J. Barnes:* It is puzzling how the discussion about what Galen knows and what he does not know about God is introduced in *Plac.Prop.* 2, 1 (p.56,14-17). Galen starts the chapter by saying that he does not know whether the world is generated or not, and whether there is anything outside the world or not. And he goes on to say that, since he does not know this, he also does not know the answer to certain questions about God, for instance whether he is incorporeal or corporeal, and where he is located. What is the connection between the two sets of questions?

*M. Frede:* I myself have been puzzled by the beginning of *Plac.Prop.* 2. There are two things I have been puzzled by, your question and, prior to that question, the question why Galen begins with issues concerning the world. The two questions may be related. As to the prior question, I believe that Galen is inclined to think, following in this Plato's *Timaeus*, that the sensible world is itself a god, or at least that he has to face this question, given the Platonist and, to some extent, the Stoic position. It seems to me that the issues Galen raises in chapter 2 to 4 all concern items which have been claimed to be in some way divine, claims Galen seems to have some sympathy with: the world, God, the soul, the stars. As to your question, one might be tempted to answer it in the following way, if one just looked at our text. Suppose the world were not generated even in the attenuated sense in which later Platonists take it to be created by a Demiurge, a view Galen himself seems to accept in *UP*. Then the world itself would be not just a god, but God. And in this case God would be corporeal at least in the sense of having a body. And he would have a location. But if the world is generated, even if only in this attenuated sense, then it seems



that God must be something distinct from this world. And hence the question arises whether God in this case is not something incorporeal and without location. Along these lines one might be tempted to think that the second issue raised about the world, namely whether there is something outside and beyond it (cf. the Hebrew version), was not primarily the issue whether God was outside the world or not. But if one looks at the parallel sets of questions in *PHP* 9, 6, 21 and in 9, 7, 9 it becomes unclear as to whether this is what Galen can have in mind here. Hence I do not see a clear and satisfactory answer to your question.

*J. Jouanna:* Dans votre étude sur la théologie dans le *De usu partium*, j'ai été frappé par l'expression θεολογίας ἀκριβοῦς (II p.447,23 Helmreich = IV 360,13 K). Je me demande s'il convient d'établir un rapport entre cet adjectif ἀκριβοῦς et l'adverbe ἀκριβῶς, qui est employé quelques lignes plus haut à propos de l'examen de l'art de la nature. N'y aurait-il pas une relation entre un examen 'rigoureux' de l'art de la nature et une théologie 'rigoureuse'?

*M. Frede:* I completely agree with you that there is a question about the exact force of ἀκριβοῦς in *UP* 17, 1, II p.447,23, and I gladly accept your observation that we may be able to determine its force with the help of the ἀκριβῶς a few lines above in II p.447,14 (= IV 360,5 K). The theology can only be precise or rigorous, if it is based on facts which have been accurately, rigorously, precisely determined. Hence the need for an accurate or rigorous study, involving sophisticated anatomy, of how artfully the parts of the body are constructed. But I think more can and needs to be said about the exact force of 'rigorous' here. The study of the use of the parts is such that it allows us to determine the relevant facts rigorously, because it makes them manifest or evident. By contrast, Galen explains some lines further on (II p.448,5-9 = IV 361,3-6 K), if we go to the Eleusinian or Samothracian mysteries, what we are shown, when

we are initiated, reveals nothing clearly and manifestly, so that we could base any reliable inferences on it. But another aspect of a precise theology, it seems to me, is exactly this, that we not only have clear, precise facts to rely on, but also that the inferences which we draw from them are rigorous and unassailable.

*T. Tieleman:* Somewhere near the beginning of your lecture you said that it has been questioned whether the reference to God's power (*virtus*) in chapter 2 of *Prop.Plac.* as reconstructed by Vivian Nutton is an authentic feature of Galen's original exposition. I see no good reason to doubt this. In fact what we have in chapter 2 is the traditional threefold distinction between being (*οὐσία*), power (*δύναμις*), and activity (*ἐνέργεια*), reflected in the Latin version by the terms *substantia*, *virtus*, and *operatio*. Galen uses this distinction as an inferential chain, going from observable activities to powers and concluding from powers to the being (*i.e.* existence) of God, though remaining typically agnostic about His being in the sense of essence (2, 2, p.58,2-4). The distinction has old Platonic credentials. It goes back to Plato's own criterion of being as the power to act or be acted upon (*Soph.* 247 e 3-4). Both the distinction and the procedure (*i.e.* the inferences) connected with it are found in later Platonic literature dealing with God, or the soul: see, for instance, Tertullian, *Anim.* 14, 3, Iamblichus, *In Platonis Alcibiadem* Fr.4,12-16 Dillon (cf. also J.M. Dillon's commentary *ad loc.*). Galen applies the schema to the soul at *PHP* 9, 9, 42 ff. De Lacy (= V 803,10 ff. K).

*M. Frede:* I find your comments very helpful, and I agree that Galen here clearly is relying on a distinction between the existence of something, its power or powers, and the activity this power manifests itself in, and that hence a reference to God's power must be an integral part of Galen's original text in *Plac.Prop.* 2, rather than part of a translator's expansion of the text.

