MELANCHOLY IN ANCIENT PHYSIOLOGY

The theory is explained in the most famous of the "Problems" attributed to Aristotle, which shall be rendered in full.

Problem XXX, 154

Why is it that all those who have become eminent in philosophy or politics or poetry or the arts are clearly melancholics, and some of them to such an extent as to be affected by diseases caused by black bile? An example from heroic mythology is Heracles. For he apparently had this constitution, and therefore epileptic affections were called after him "the sacred disease" by the ancients. His mad fit in the incident with the children points to this, as well as the eruption of sores which happened before his disappearance on Mount Oeta; for this is with many people a symptom of black bile. Lysander the Lacedaemonian too suffered from such sores before his death. There are also the stories of Ajax and Bellerophon: the one went completely out of his mind, while the other sought out desert

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The close connexion between melancholy and epilepsy was pointed out by the Hippocrates; see p. 15, note 41.
And since of all the Gods he was hated,
Verily o'er the Aleian plain alone he would wander,
Eating his own heart out, avoiding the pathway of mortals;"

Among the heroes many others evidently suffered in the same way, and among men of recent times Empedocles, Plato, and Socrates, and numerous other well-known men, and also most of the poets. For many such people have bodily diseases, as the result of this kind of temperament; some of them have only a clear constitutional tendency towards such afflictions, but to put it briefly, all of them are, as has been said before, melancholics by constitution.

In order to find out the reason, we must begin by making use of an analogy: Wine in large quantity manifestly produces in men much the same characteristics which we attribute to the melancholic, and as it is being drunk it fashions various characters, for instance irritable, benevolent, compassionate or reckless ones; whereas honey or milk or water, or anything else of this kind, do not have this effect. One can see that wine makes the most varied characters, by observing how it
gradually changes those who drink it; for those who, to begin with, when sober, are cool and taciturn become more talkative when they have drunk just a little too much; if they drink a little more it makes them grandiloquent and boisterous and, when they proceed to action, reckless; if they drink still more it makes them insolent, and then frenzied; while very great excess enfeebles them completely and makes them as stupid as those who have been epileptic from childhood or as those who are prey to excessive melancholy. Now, even as one individual who is drinking changes his character according to the quantity of wine he consumes, so there is for each character a class of men who represent it. For as one man is momentarily, while drunk, another is by nature: one man is loquacious, another emotional, another easily moved to tears; for this effect, too, wine has on some people. Hence Homer said in the poem:

"He says that I swim in tears like a man that is heavy with drinking."

Sometimes they also become compassionate or savage or taciturn—for some relapse into complete silence, especially those melancholics who are out of their minds. Wine also makes
men amorous; this is shown by the fact that a man in his cups may even be induced to kiss persons whom, because of their appearance or age, nobody at all would kiss when sober. Wine makes a man abnormal not for long, but for a short time only, but a man’s natural constitution does it permanently, for his whole lifetime; for some are bold, others taciturn, others compassionate and others cowardly by nature. It is therefore clear that it is the same agent that produces character both in the case of wine and of the individual nature, for all processes are governed by heat. Now melancholy, both the humour and the temperament, produce air; wherefore the physicians say that flatulence and abdominal disorders are due to black bile. Now wine too has the quality of generating air, so wine and the melancholy temperament are of a similar nature. The froth which forms on wine shows that it generates air; for oil does not produce froth, even when it is hot, but wine produces it in large quantities, and dark wine more than white because it is warmer and has more body.

It is for this reason that wine excites sexual desire, and Dionysus and Aphrodite are rightly said to belong together,
and most melancholy persons are lustful. For the sexual act is connected with the generation of air, as is shown by the fact that the virile organ quickly increases from a small size by inflation. Even before they are capable of emitting semen, boys approaching puberty already find a certain pleasure in rubbing their sexual organs from wantonness, the manifest reason being that the air escapes through the passage through which the fluid flows later on. Also the effusion and impetus of the semen in sexual intercourse is clearly due to propulsion by air. Accordingly those foods and liquids which fill the region of the sexual organs with air have an aphrodisiac effect. Thus dark wine more than anything else makes men such as the melancholics are. That they contain air is obvious in some cases; for most melancholy persons have firm flesh and their veins stand out, the reason being the abundance not of blood but of air. However, the reason why not all melancholics have hard flesh and why not all of them are dark but only those who contain particularly unhealthy humours, is another question.

But to return to our original subject: the atrabilious humour in the natural constitution is already something mixed as it
is a mixture of heat and cold, for of these two things nature is
combined. Black bile can therefore become both very hot and
very cold, for one and the same substance can naturally under-
go both: for example water, which although in itself cold, yet
when sufficiently heated (for example, when boiling) is hotter
than the flame itself. And stone and iron when red-hot become
hotter than charcoal, though they are cold by nature. This
subject is dealt with in more detail in the book concerning
fire.\footnote{It has been observed (C. Prantl, \textit{Abh. d. bayer. Akad.}, vi, 2, 353) that this reference
clearly points to a connexion of our Problem with Theophrastus. It evidently refers to
Theophrastus \textit{Hepi \nu\rho\sigma\varsigma} (ed. A. Gercke, Greifswald 1866), ch. 35 which deals with materials
like iron and stone which, though 'naturally cold', get very hot. As we know from the list
of his writings given in Diogenes Laertius (v, 44) that Theophrastus wrote a book \textit{On}
\textit{Melancholy}, the inference that our Problem is connected with this book seems safe. Cf.
Alleriumswissenschaft}, Suppl. 7, cols. 1402, 1406.}

\footnote{\textit{έπιπόλαιος} Sylburg.}
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straight away the greatest variety of characters, each according to his individual mixture. For example, those who possess much cold black bile become dull and stupid, whereas those who possess much hot bile are elated and brilliant or erotic or easily moved to anger and desire, while some become more loquacious. Many too are subject to fits of exaltation and ecstasy, because this heat is located near the seat of the intellect; and this is how Sibyls and soothsayers arise and all that are divinely inspired, when they become such not by illness but by natural temperament.

Maranus, the Syracusan, was actually a better poet when he was out of his mind. Those, however, in whom the black bile’s excessive heat is relaxed towards a mean, are melancholy, but they are more rational

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(a) ἑπαναθη Bywater] ἑπαναθη codd.

88 The sentence δος δ’ ἐν ἑπαναθῇ τὴν ὅγγαν θερμότητα πρὸς τὸ μέσον is unintelligible as it stands (H. Bonitz in his admirable Index Aristotelicae, p. 265, also cites the verb ἑπαναθή as corrupt), and has given rise to several emendations, none entirely satisfactory; the best, perhaps, is Bywater’s ἑπαναθή ή ὅγγαν θερμότητα. According to the context the meaning must be that reasonable (and therefore highly gifted) melancholics are protected both from over-heating (as occurs among μανικοῖ, and especially among Bakides, Sibyls, etc.) and from chill (as occurs among ῥυθροὶ καὶ μάρας), thus, to that extent, achieving a “μέσον”. It might be suggested to replace “ἐπαναθή” by “ἐπαναναθῆ”, thus not only making the sentence correct grammatically, and giving it a meaning, but making it accord with Aristotle’s usage elsewhere: cf. Περὶ ἀναφοράς 14, 478 a 3: ἐπαναθῆ γὰρ εἰς τὸ μέσον ὁ τότε τὸν τὴν ὅγγον ὑπερβολήν. However, we prefer to read ἑπαναθῆ τὴν ὅγγαν θερμότητα (understood as “accusative of respect”), and earlier translators were also agreed as to the necessity for emending this passage. Theodorus of Gaza translates it: “at quibus minus [sic for ‘nimius’] ille calor remissus ad mediocratatem sit”; the Venice edition of 1501 (Aristotelis Problemata, fol. 24r) has “quibusquacunque autem latere caliditatem reducit ad medium”, and the edition with excellent commentary of Ludovicus Septulius (In Aristotelis Problematum commentarium, Lyons 1629, vol. iii, p. 346) has “At quibus caliditas magna ad mediocratatem reducitur”.

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§2] THE NOTION OF MELANCHOLY: PROBLEM XXX, I

... and less eccentric and in many respects superior to others either in culture or in the arts or in statesmanship. Such a constitution also makes for great differences in behaviour in dangerous situations in that many of these people react inconsistently in frightening circumstances; for according to the condition of their bodies at a given time in relation to their temperament, they behave now one way now another: the melancholy temperament, just as it produces illnesses with a variety of symptoms, is itself variable, for like water it is sometimes cold and sometimes hot. Therefore if it so happens that something alarming is announced at a time when the admixture is rather cold, then it makes a man cowardly;—for it has prepared a way for the fear, and fear makes one cold, as is shown by the fact that those who are frightened tremble.—If however the mixture is rather warm, fear reduces it to a moderate temperature and so he is self-possessed and unmoved.

So too with the despondency which occurs in everyday life, for we are often in a state of grieving, but could not say why, while at other times we feel cheerful without apparent reason. To such affections and

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(1) τῷ Richards] τοῦ codd.
(2) ἐν Richards] μὲν codd.
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πάθη καὶ τὰ πάλαι(1) λεχθέντα κατὰ μέν τι μικρὸν πάσι γίνεται· πάσι γὰρ μέμικται τι τῆς δυνάμεως· ὅσοι δὲ εἰς βάθος, οὕτων δὲ ἥδη ποιοὶ τινὲς εἶσι τὰ ἠθν. ὅσπερ γὰρ τὸ εἶδος ἑτέρων γίνονται οὐ τὸ πρόσωπον ἔχειν, ἀλλὰ τῷ ποιόν τι τὸ πρόσωπον, οἱ μὲν καλοὶ, οἱ δὲ λακονίκων, οἱ δὲ μηδὲν ἐχοντες περιττοί, οὕτως δὲ μέσοι τὴν φύσιν, οὕτως καὶ οἱ μὲν μικρὰ μετέχουστε τῆς τοιαύτης κράσεως μέσοι εἰσίν, οἱ δὲ πλῆθος ἡδῆ ἀνόμοιοι τοῖς πολλοῖς. ἔτι δὲν γὰρ σφόδρα κατακορής ἢ ἡ ἐξῆς, μελαγχολικοὶ εἰσίν λίαν, ἕτοι δὲ τοὺς κραξοὺς, περιττοῖς, ἐπέτουσι δὲ, ἐὰν ἀμελῶσιν, ἐπὶ τὰ μελαγχολικά νοσήματα, ἄλλοι περὶ ἀλλῳ μέρους τοῦ σώματος· καὶ τοῖς μὲν ἐπιληπτικά ἀποστημαίνει, τοῖς δὲ ἀποτηλητικά, ἄλλοις δὲ ἐφημεία λαχυραὶ ἢ φόβοι, τοῖς δὲ δάριῃ λίαν, οἷον καὶ Ἀρχελάος συνέβαινε τῷ Μακεδονίας βασιλεί. ἀφίσιν δὲ τῆς τοιαύτης δυνάμεως ἢ κράσεις, ὅπερς δὲ ἐχὶ μοῦξεως τε καὶ θερμόττητος. ἤχυρτέρα μὲν γὰρ οὐσα

to those mentioned before(2) we are all subject in some small degree, for a little of the stuff which causes them is mixed in with everybody. But with people in whom this quality goes deep, it determines the character. For as men differ in appearance not because they possess a face but because they possess such and such a face, some handsome, others ugly, others with nothing extraordinary about it (those whose looks are ordinary); so those who have a little of this temperament are ordinary, but those who have much of it are unlike the majority of people. For if their melancholy habitus is quite undiluted they are too melancholy; but if it is somewhat tempered they are outstanding. If they are not careful they tend to melancholy sicknesses, different individuals being affected in different parts of the body: some people suffer from epileptic symptoms, others from paralytic ones, others from violent despondency or terrors, others from over-confidence, as happened to Archelaus, King of Macedonia.

Such tendencies are caused by the temperament, according to whether it is hot or cold. If it is

(1) πάλαι Sylburg (superius Theodorus Gaza) παλαιά cold.

(2) Sylburg's conjecture seems necessary and restores an expression frequently used by Aristotle when referring to something 'said above', cf. Poli. B.4, 1265 b 29; and Γ7, 1282 a 95. The reference here is to the melancholy symptoms described before. There is, however, the possibility, that the reference as such has been lifted from the original source of the Problema, just as the one above (see note 57), and refers to a passage in Theophrastus's work now lost.
unduly cold, considering the circumstances, it produces irrational despondency; hence suicide by hanging occurs most frequently among the young, and sometimes also among elderly men. Many men, also, put an end to themselves after drunkenness, and some melancholics continue in a state of despondency after drinking; for the heat of the wine quenches their natural heat. (Heat in the region in which we think and hope makes us cheerful; and therefore all men are keen on drinking to the point of intoxication, for wine makes everybody hopeful, even as youth does children; for old age is pessimistic, but youth is full of hope.) There are a few who are seized with despondency while actually drinking, for the same reason as makes others despondent after drinking. Now those who become despondent as the heat in them dies down are inclined to hang themselves. Hence the young and the old are more likely to hang themselves; for in one case old age itself makes the heat die down, in the other, passion, which is something physical too. Most of those men in whom the heat is extinguished suddenly make away with themselves unexpectedly, to the astonishment of all, since they have given no previous sign of any such intention.
When the mixture dominated by black bile is colder it gives rise, as has already been remarked, to despondency of various kinds, but when it is hotter, to states of cheerfulness. Hence children are more cheerful and the old more despondent, the former being hot and the latter cold; for old age is a process of cooling. Sometimes the heat is extinguished suddenly from external causes, just as red-hot objects being quenched against their natural tendency (i.e. artificially), for example, coal when water is poured on. Hence men sometimes commit suicide after drunkenness; for the heat of the wine is introduced from outside, and when it is quenched suddenly this condition is set up. Also after sexual intercourse most men become despondent; those however who emit abundant secretion with the semen become more cheerful, for they are relieved of superfluous liquid, of air, and of excessive heat. But the others often become rather despondent, for they become cooled by the sexual act, because they lose necessary constituents, as is shown by the fact that the amount of fluid emitted is not great.

To sum up: The action of black bile being variable, melancholics are variable, for the black bile becomes very hot and
very cold. And as it determines the character (for heat and cold are the factors in our bodies most important for determining our character): like wine introduced in a larger or smaller quantity into the body, it makes us persons of such and such a character. And both wine and bile contain air. Since it is possible for this variable mixture to be well tempered and well adjusted in a certain respect—that is to say, to be now in a warmer and then again a colder condition, or vice versa, just as required, owing to its tendency to extremes—therefore all melancholy persons are out of the ordinary, not owing to illness, but from their natural constitution.

Black bile—so runs the argument in the preceding Problem XXX, i, which has been called “a monograph on black bile”—is a humour present in every man without necessarily manifesting itself either in a low bodily condition or in peculiarities of character. These latter depend rather, either on a temporary and qualitative alteration of the melancholy humour as caused by digestive disturbances or by immoderate heat or cold, or on a constitutional and quantitative preponderance of the melancholy humour over the others. The first generates “melancholic diseases” (among them epilepsy, paralysis, depression, phobias, and, if immoderate heat be the cause, recklessness, ulcers and frenzy); the second makes a man a melancholic by nature (μελαγχολικός διὰ φύσιν)—and here for the first time the difference, present in the theories of medical writers as a tacit presupposition of which they were at most only partially aware, was clearly shown and expressed. Evidently the second possibility did not exclude the first, for it was obvious that the natural melancholic would be particularly subject to melancholy diseases, and in a particularly virulent form. On the other hand, men normal by nature—οἱ πολλοὶ—could never acquire the qualities proper to the natural melancholic

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(a) ἔδε add. Richards.