XXII.—Galen the Physician as Physiognomist

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Galen's interest in the theories of the physiognomists may well have been awakened during his residence as a student of medicine at Smyrna, the center for the New Sophistic, among whose leaders. Polemo, the rhetor and physiognomist, had died shortly before Galen's arrival there. The basis of Galen's approach to the pseudo-science of physiognomy lay in the doctrine of the humours. The work of Galen that may be described as a kind of small handbook on physiognomy is entitled, $B\iota\beta\lambda lo\nu$ öti $\tau a\hat{\imath}s$ $\tau o\hat{\imath}$ σώματος κράσεσιν al τῆς ψυχῆς δυνάμεις ξπονται. This book contains his most significant ideas on the subject. As he draws widely on earlier authors, especially Plato, Aristotle, and Hippocrates, the discussion is essentially eclectic.

Geneva Misener, writing on Loxus in Classical Philology some twenty years ago, entitled her article "Loxus, Physician and Physiognomist," and sought to place that inadequately dated figure in his proper position in the late fifth century, or in the first half of the fourth century before Christ. She did so by reason of "the central doctrine upon which his science of physiognomy was built." — namely the location of the soul in the blood, which connected him with Empedocles and the Sicilian school of medicine. Of Loxus Medicus we have but a few fragments on which to build some picture of his contribution to medical and physiognomical literature. but his work represents the close connection which this pseudoscience always enjoyed with the science of medicine. period of Hippocrates to the time of Adamantius of Alexandria and Oribasius, Julian's physician in the fourth century of our era, the names of the great doctors of antiquity are repeatedly associated with the theories of physiognomy. Galen's study of this subject is set forth in a number of essays in the great corpus of his medical writings, one of which seems to bring together his most important ideas on the relation of man's character and his physical appearance. It is with this essay that this paper is concerned.

The popularity which the study of physiognomy achieved in the second century after Christ has been discussed elsewhere.² In the

¹ "Loxus, Physician and Physiognomist," CPh 18 (1923) 1-22.

² E. C. Evans, "The Study of Physiognomy in the Second Century A.D.," *TAPhA* 72 (1941) 96–108.

first half of the century, Polemo of Laodicea, the distinguished rhetorician at Smyrna, was composing a handbook on the subject as a guide for professors of rhetoric. In the latter half of the century Galen was treating its doctrines as an important part of a physician's training. Galen was born at Pergamum, probably in 129 A.D., the son of an architect Nicon. Within Nicon's lifetime he had already become acquainted with the tenets of the main philosophical schools, Platonic, Aristotelian, Stoic, Epicurean; and his training in philosophy took a fundamental place in his later thinking. He early started the study of medicine at Pergamum in the Temple of Aesculapius, and continued that training at Smyrna under the physician Pelops. The rhetorical school of Smyrna had just lost several of its most outstanding teachers, Scopelian, Timocrates, and above all, the leader of the New Sophistic, Polemo, whose pupil, Aristides, was then at the height of his fame.4 Polemo's services to the city of Smyrna had been highly honored, and his close friendship with Hadrian had resulted in many gifts to the city on the part of the Emperor.⁵ "All Ionia," remarks Philostratus, "is like a college of learned men, but Smyrna holds the highest place, like the bridge upon the cithara."6 Inevitably the influence not only of the teachers of medicine at Smyrna left its mark on Galen's youthful mind, but the high regard held for Polemo in that city must have made its impression as well. From the fact that Polemo's handbook on physiognomy was quoted repeatedly in ancient times it would be difficult for us not to believe that Galen, though he does not refer to it specifically, became familiar with it during his stay in Smyrna. A direct reference to Polemo occurs in Galen's account of his own residence in Rome: μετὰ τὸ τριακοστὸν ἔτος ἐν Ῥώμη διέτριψα, πόλει τοσοῦτον ἀνθρώπων πληθος ἐχούση, where he quotes Polemo as saying that Rome was the epitome of the inhabited world: ws έπαινεισθαι Πολέμωνα τὸν ῥήτορα τῆς οἰκουμένης ἐπιτομὴν αὐτὴν εἰπόντα.⁷ Galen's use of the term φυσιογνωμοῦντες,8 while general, may be said

³ Cf. W. Christ, W. Schmid, O. Stählin, Geschichte der griechischen Literatur (6th ed. rev., Munich, 1924) 2.2.912 ff.

⁴ J. Walsh, "Galen's Writings and Influences Inspiring Them," Annals of Medical History, N.S. 6 (1934) 144.

⁵ E. C. Evans, "Descriptions of Personal Appearance in Roman History and Biography," HSPh 46 (1935) 49-51.

⁶ Philostr. V. S. 1.21.56 (Scopelian); trans. by J. Walsh (see note 4).

⁷ Hippoc. de artic. lib. et Gal. in eum comm. 1.22 (Kühn 18.1, 347).

⁸ Mixt. 2.6 (Kühn 1.624); ed. by G. Helmreich (Leipzig, 1904).

at least to refer to the active practitioners of the art, among whom surely Polemo was the outstanding figure of the day. After further study at Corinth and Alexandria, Galen returned to Pergamum, and in 157 was appointed physician to the gladiators. On the completion of his term with the gladiators he left Pergamum for the west and reached Rome about 161, where he remained at least three vears. His remarkable demonstrations there antagonized the less able and original physicians of the city, so that it became almost imperative that he depart from the city. He did so. Rome, meanwhile, was engaged in foreign wars. Marcus Aurelius, and his colleague, Lucius Verus, were in the north fighting the Marcomanni. During the fall of 169 A.D. when the Roman troops were returning to winter quarters in Aquileia, the great pest broke out, and Galen was summoned by the Emperor.9 The plague,10 which had raged earlier in the East, had spread even at the time of Galen's previous residence in Rome. Galen came back to the city, became the physician of the young Commodus at Lorium, but did not accompany Marcus Aurelius north with the army. It was during these years that he wrote extensively on medical subjects. Conditions in Rome had by this time become so favorable for him under the direct patronage of the Emperor that he decided to settle there in 179, and devoted himself to writing and public lectures on hygiene, anatomy, and physiology. During the fearful years that followed the death of Marcus Aurelius, Galen continued his work and delivered, probably in 193 A.D., his exhortation to the study of the arts, especially medicine. We do not hear of him after he had finished the catalogue of his writings, and his death is placed about 200 A.D.¹¹ Whether or not he returned to Pergamum in this period is not known.

The basis of Galen's approach to physiognomy is the doctrine of the humours, the nature of which will be discussed somewhat further on. We have already noticed in an earlier study that

⁹ De praenot. ad Post. lib. 9 (Kühn 14.649).

¹⁰ Libr. propr. 1 (Kühn 19.15); ed. by I. Müller, Scripta Minora of Galen (Leipzig, 1891) 2.91-124. W. Osler (Principles and Practice of Medicine, 7th ed. rev. [New York and London, 1911] 112 ff.) believes the epidemic was smallpox. Max Neuburger (History of Medicine, trans. by E. Playfair [London, 1910] 1.247) states that the epidemic lasted about fifteen years, and its manifestations resembled smallpox or dysentery. See J. Walsh, "Refutation of the Charges of Cowardice Made Against Galen," Annals of Medical History, N.S. 3.1. (1931) 195-208, esp. 207-208, note 32.

¹¹ Christ, Schmid, Stählin, Gesch. d. gr. Lit. 2.2.912.

Galen's physiognomical material comprised in part quotations from his "master" Hippocrates, and from Plato and Aristotle, and in part his own observations in the medical field.¹² It is at the same time disappointing that we do not find in Galen's writings more casehistories of men whom he had studied from a physiognomical point of view, whereas Polemo was generous in that regard. It must always be remembered that Galen was primarily a physician, and that his case-records deal with medical diagnosis, which must not be confused with what appears as closely allied physiognomical material. In the Ars Medica,13 for example, he discusses physical warmth of heart as marked by certain inseparable and particular signs, the depth of respiration, pulse, its speed and frequency, daring and restlessness for action. "For," he says, "if very much heat dominates, straightway there is bitter anger and madness and rashness. In such people the thorax is shaggy and especially the chest and the parts near the praecordia. In general, even the whole body becomes warm when the heart is warm, unless the liver is strongly opposed to it." Here, obviously, there is an amalgamation of medical diagnostic material and physiognomical ideas. There is an inevitable difficulty in attempting to separate the two elements.¹⁴ because these elements in Galen's conception of the nature of the human being are not separable.

Galen judiciously observes that the physiognomists are always ready to pronounce on the character of a man from his outward appearance. "When they say that he has a chest like a lion and is therefore spirited, but legs like a goat, and is lascivious, they describe what they have observed, but they have omitted the reason for these characteristics." Here he strikes at the weakness of the physiognomical handbooks we possess. The pseud-Aristotelian tract states at the outset that "mental character is not independent of and unaffected by bodily processes, but is conditioned by the state of the body; and contrariwise the body is sympathetically in-

¹² TAPhA 72 (1941) 107-108.

^{13 10 (}Kühn 1.332-334). The passage I have translated reads as follows: εί δὲ ἐπὶ πλεῖστον ἤκει θερμότητος, ὀξυθυμία τε μανιώδης καὶ θρασύτης. ἔστι δὲ καὶ λάσιος αὐτοῖς δ θώραξ, καὶ μάλιστα τὰ στέρνα, καὶ τῶν καθ' ὑποχόνδριον ὅσα τοὐτοις πλησίον. ὡς ἐπὶ τὸ πολὺ δὲ καὶ τὸ σύμπαν σῶμα θερμὸν ἐπὶ θερμῆ τῆ καρδία γίνεται, πλὴν εί μὴ μεγάλως ἀντιπράττοι τὸ ἦπαρ.

¹⁴ Lynn Thorndike (*History of Magic and Experimental Science* [New York, 1923] 1.176) points out this fact.

¹⁵ Mixt. 2.6 (Kühn 1.624).

fluenced by the affections of the soul,"16 but the treatise probes no deeper. Polemo's handbook is a practical guide to the recognition of certain types and characteristics, yet there is no attempt to suggest the reasons why such traits occur. In Galen, therefore, is found a significant effort to study the relation of the physique of a man to his character, an effort to relate the humours of the body to the temperament. Ultimately the relationship rests on the proper krasis or blending of the humours.¹⁷ The theory of the humours is ascribed first to Alcmaeon of Croton of the Pythagorean school.¹⁸ It was taken over by the followers of Hippocrates, accepted by Galen and elaborated. To the older idea of the four elements, earth, air, fire, and water, was applied the theory of mixture or krasis in the body. Since the solid tissues of the body were pretty much fixed, the concept evolved of four fluids circulating freely through the body, which maintained by the proper krasis the balance of health in the human frame — εὐκρασία. Thus, as Neuburger points out, "The fundamental constituents of the body . . . are warm, cold, dry, and moist, qualities, which taken as matter, build up the tissues and organs, taken as forces, condition the vital processes; the warm and cold rank as active powers, the dry and moist as passive."19 It is necessary to remember that for Galen "the basic principle of life" was a spirit (pneuma) derived from a breathing world spirit. Pneuma entered the body from without through the windpipe and the lungs, and was carried to the heart, where it controlled the innate heat of the body, and imparted the proper temperature to the blood.20 The heart, since it was the main organ for the pneuma, was thought to be the seat of the soul. The pneuma was quickly affected by the improper krasis or mixture of the elemental qualities, and so produced disease. It is clear that Galen adopted the Platonic three-fold division of the pneuma, for he describes it in his Liber de methodo medendi.21 Together with the acceptance of the

¹⁶ Phgn. 805a (trans. by T. Loveday and E. S. Forster). Cf. also 808b.

¹⁷ See Christ, Schmid, Stählin, op. cit. (see note 3) 2.2.915, note 8, for a discussion of sources of the work, *In Hippoc. lib. de humor. comm.*, in Galen's corpus.

¹⁸ See note 22.

¹⁹ Neuburger, op. cit. (see note 10) 1.225.

²⁰ Cf. C. Singer, A Short History of Medicine (New York, 1928) 56-58. The blood, according to Galen, was derived from the food substance "chyle," carried from the intestine to the liver, where it was transformed into blood.

 $^{^{21}}$ 2.9 (Kühn 10.635–636); cited and translated by F. B. Lund, $\it Greek\ Medicine$ (New York, 1936) 105.

pneuma as the principle of life goes the idea of the preservation of equilibrium among the hot, cold, moist, and dry qualities of the tissues. The fluids able to produce the desired balance were the blood, which was hot and moist, the phlegm, which was cold and moist, the black bile, which was cold and dry, and the yellow bile, which was warm and dry. In this fashion the four humours circulating in the system affect the nature of the human temperament and in turn its relation to the outward appearance of the individual.

Thanks to the work of Van Wageningen,22 the history of the four humours has been traced from the sixth century B.C. down through the Middle Ages. Alcmaeon was the first, so far as we know, who applied the term *krasis* to the blending of these forces or qualities, a word which the Romans translated by temperamentum.²³ Parmenides²⁴ took over this conception and transferred it to the condition of the mind, by declaring that the keenness of the mind consisted in a certain mixture of warm and cold. If heat were intense in the mind, memory was strong, but if cold prevailed, forgetfulness pervaded the mind. Empedocles,25 with his acceptance of the four elements, set forth his theory of mixture more fully, believing that the seat of the brain and of the soul was in the blood. If the elements were more loosely connected, the nature of man became slow and inclined to sloth, if more dense, then the motion became more rapid, and the action of man increased. Plato, 26 in turn, expressed his belief that good health depends on the four elements and their proper mixture, but he did not seek to refer the character of men to these elements. Hippocrates27 accepted the idea of four humours or fluids in the body, and considered the mixture of them to be the cause of good health or disease. While Hippocrates held that the condition of the mind is connected with

²² For this discussion I am indebted to J. Van Wageningen, "De Quattuor Temperamentis," Mn N.S. 46 (1918) 374-382. Cf. H. Diels, Die Fragmente der Vorsokratiker⁴ (Berlin, 1922) 1.136 ff. (Alcmaeon).

²³ Col. 3.12: opus est, inquit, inter has tam diversas inaequalitates magno temperamento, quod in corporibus quoque nostris desideratur, quorum bona valetudo calidi et frigidi, umidi et aridi, densi et rari certo et quasi examinato modo continetur.

²⁴ Diels, op. cit. 1.146, 4 ff. (see note 22).

²⁵ Diels, op. cit. 1.218, 5 (see note 22).

²⁶ Smp. 188A; Ti. 86A.

²⁷ Nat. Hom. 4. I use the name of Hippocrates for convenience in referring to the corpus of the Hippocratic School. For recent discussions of Greek medicine see Werner Jaeger, Paideia: The Ideals of Greek Culture (New York, 1944) 3.3-45, esp. 32, "Greek Medicine as Paideia"; Charles Singer, "Medicine," in The Legacy of Greece, ed. by R. W. Livingstone (Oxford, 1928) 201-248.

the state of the body, he had not made the four-fold division of the humours with their accompanying names. Aristotle²⁸ was the first to make that connection, primarily for the melancholy man. The Stoics,²⁹ and among them Chrysippus, recognized the analogy between ἡ τῆς ψυχῆς νόσος and ἡ τοῦ σώματος ἀκαταστασία. Thus Seneca in the De Ira,³⁰ following an earlier Stoic source, explained the varieties of human nature that come from a mixture of the elements. Epicurus, likewise, ascribing an atomistic nature to both mind and body, declared that the nature of the soul is composite, being made of breath (pneuma), heat, air, and a fourth nameless substance. This substance is, as it were, the spirit of the spirit, the soul of the soul. If these elements were separated there could be no feeling, but heat is prominent in anger, air in repose, when the heart is tranquil and the countenance serene. So in this fashion Lucretius³¹ describes the soul.

It is therefore on the earlier systems of the philosophers and the tenets of the Hippocratic School that Galen established his system of kraseis or temperaments, which led to the familiar theory of the humours.³² While the melancholy man is frequently mentioned in ancient writers, also the phlegmatic man, whose nos is described by Galen as ἄτολμον καὶ δειλον καὶ δύσθυμον, 33 the terms melancholici. phlegmatici, cholerici, and sanguinei were first used in the ninth century as applied to the types of men affected by the humours of the body. This use of the terms appears in the writings of Johannitius (Honein ben Ishak), the great Arab physician who translated the works of Galen into Arabic. The so-called Honorius of Autun is said by Van Wageningen to have transferred the names introduced by Johannitius to descriptions of human character. Van Wageningen cites as support for his attribution a passage from Honorius. De philosophia mundi: Verbi gratia, homo naturaliter calidus et humidus, et inter quattuor qualitates temperatus, sed quia cor-

²⁸ Cf. C. Albutt, *Greek Medicine in Rome* (London, 1921) 296: "Aristotle declared that 'the disposition of men depended on the condition of the *atra bilis* in their bodies.' "Cf. Pr. 30.1, 953a-955a.

²⁹ J. Von Arnim, Stoicorum Veterum Fragmenta (Leipzig, 1921) 3.120.9 ff. and 121.14 (Zeno).

³⁰ 2.19.

^{31 3.288-295.}

³² Εὐκρασία is a perfect blending of the four humours. In Mixt. 1.8 (Kühn 1.554–559), Galen describes the possible combinations of warm, cold, dry, and moist which could lead to δυσκρασία.

³³ Mixt. 2.6 (Kühn 1.643).

rumpitur natura, contingit illas in illo intendi et remitti. si vero in aliquo intendatur calor et remittatur humiditas, dicitur cholericus, id est calidus et siccus, non est sine humiditate tamen. sin vero in aliquo intensus sit humor, calor vero remissus, dicitur phlegmaticus. sin autem intensa sit siccitas, remissus calor, melancholicus. sin vero aequaliter insunt, dicitur sanguineus — sed quia hoc a Johannitio in Isagogis satis dictum est.³⁴ The De philosophia mundi, however, is properly to be assigned to William of Conches,³⁵ of the School of Chartres, teacher of John of Salisbury, and one of the "most accomplished scholars of the twelfth century." This discussion of men identified by their specific dominant humours is included by Johannitius in his Isagoge ad parvam artem Galeni, and perhaps reached the hands of William of Conches through such a Latin translation as that of Constantinus Africanus,³⁶ the first great translator from Arabic into Latin.

The work of Galen that may be described as a kind of small handbook on the theories of the physiognomists is one that was translated into Arabic in the ninth century: Γαλήνου βιβλίον ὅτι ταῖς τοῦ σώματος κράσεσιν αὶ τῆς ψυχῆς δυνάμεις ἔπονται, ³7 "that the faculties of the mind follow the mixtures or temperaments of the body." The discussion, based on the theory of the humours, is essentially eclectic. From experience, he assures us, he has frequently observed that the powers of the mind are closely connected with the temperaments of the body. This opinion was not his own, but was

 34 4.20 (Migne, $\dot{P}L$ 172.93). The passage continues: cholerici namque longi et graciles, longi ex calore et graciles ex siccitate. sanguinei vero propter calorem longi, pingues propter humiditatem. phlegmatici vero propter frigiditatem parvi, propter humiditatem grossi. melancholici autem propter siccitatem graciles, propter frigiditatem breves. istae naturales proprietates saepe variantur ex accidente. nam cholerici et melancholici vel ex otio, vel comestione sunt pingues; sanguinei et phlegmatici ex abstinentia, vel labore graciles.

³⁶ M. Manitius, P. Lehmann, Geschichte der lateinischen Literatur des Mittelalters (Munich, 1931) 3.2. 216–217. Nevertheless in Honorius' work, De imagine mundi, a passage relevant to the present discussion occurs: 2.59 (De homine microcosmo). For this reference I am indebted to Prof. Eva M. Sanford of Sweet Briar College.

³⁶ Cf. C. H. Haskins, Studies in the History of Mediaeval Science (2nd ed., Cambridge, 1927) 39; Lynn Thorndike, History of Magic and Experimental Science 1.742-759, on Constantinus Africanus (ca. 1015-1087). In Max Meyerhof's analysis of Honein's translations from Greek into Syriac and Arabic is listed the translation of De temperamentis and Quod animi mores corporis temperamenta sequantur; "New Light on Hunain Ibn Ishaq and his Period," Isis 8 (1926) 685-724, esp. 701.

³⁷ Ed. by I. Müller in *Scripta Minora* of Galen (Leipzig, 1891) 2.32–79. In Kühn's edition, which has been regularly cited for other works of Galen in this article, the title is (4.767–822): Γαλήνου ὅτι τὰ τῆς ψυχῆς ἥθη ταῖς τοῦ σώματος κράσεσιν ἔπεται. The Latin title is that cited in note 36.

reached after careful inquiry by teachers and philosophers. Children show this diversity of mind and body, as some are stupid, some timid, some generous, some greedy. The faculties of the soul are located in the liver, the heart, and the brain. He reviews the ideas of philosophers including Plato, Aristotle, and the Stoics on the nature and immortality of the soul, as these thinkers appear to have ascribed much importance to the presence of heat, cold, moistness and dryness in the human being. Wherefore, asks Galen, is dryness the cause of wisdom, and moistness of madness? The influence of the *krasis* of the body in bringing about mental illnesses is discussed, and it is declared that the mind is damaged by such bodily afflictions as injured humours. Galen draws widely on earlier writers and so presents a neat compendium of points to be observed in studying the principles of physiognomy. Taking Plato's Timaeus³⁸ as his authority for the importance of the humours in the equilibrium of the body he cites the passage in which Plato declares: "Where the acid and briny phlegm and other bitter and bilious humours wander. over the body, and find no exit or escape, but are pent up within and mingle their own vapors with the motions of the soul and are blended with them, they produce all sorts of diseases, more or fewer, and in every degree of intensity, and being carried to the three places of the soul, whichever they may severally assail, they create infinite varieties of ill temper and melancholy, of rashness and cowardice, and also of forgetfulness and stupidity." He follows Aristotle in the belief that the δυνάμεις της ψυχης depend upon the κράσις of the mother's blood, from which our own arises. He cites as evidence a passage from the second book of the De partibus animalium: "The thicker and hotter the blood is, the more conducive it is to strength, while in proportion to its thinness and coldness is its suitability for sensation and intelligence. . . . Noblest of all (animals) are those whose blood is hot and at the same time thin and clear. are suited alike to the development of courage and intelligence."39 With extensive quotation from Aristotle on the nature of the blood and its relation to the disposition of the individual. Galen proceeds to an account of the familiar doctrine of Aristotle that the conformation of the whole body in each kind of animal becomes peculiar to the character and faculties of the soul. According to the physiognomists, moreover, certain things clearly and directly represent the

^{38 86}E-87A (trans. by B. Jowett).

^{39 2.2, 648}a (trans. by W. Ogle). Cf. Galen, op. cit. (see note 37) 7 (Kühn 4.791).

krasis of soul and body, especially what is to be observed from color, hair, voice, and the action of certain parts. This statement leads him to a series of remarks taken over directly from Aristotle's Historia animalium. They deal with specific physiognomical signs, based on parallelisms with animals: "When men have large foreheads, they are slow to move; when they have small ones, they are fickle; when they have broad ones, they are apt to be distraught; when they have foreheads rounded or bulging out, they are quick tempered. . . . Of the eye the white is pretty much the same in all creatures; but what is called black differs in various animals. some it (the ὅμμα) is μέλαν, for others, γλαυκόν or χαροπόν, which is a sign of an excellent disposition."40 As in the case of Polemo and the other physiognomists, the eyes are of primary importance. with Aristotle he declares that some are large, some small, some medium sized; of these the medium sized are best; moreover eves sometimes protrude, sometimes recede, sometimes neither; of these the receding eves are in all animals the most acute; but the last kind is the sign of the best disposition. Again, eves are sometimes inclined to wink under observation, sometimes to remain open and staring, and sometimes are disposed neither to wink nor stare. The last kind is the sign of the best nature, and of the other two, the first indicates indecision and the second impudence. Similarly, on the subject of ears he follows the prudent Aristotelian dogma of the excellence of those of medium size and medium position, as large and outstanding ears indicate a tendency to irrelevant talk and chattering. He ends his discussion of Aristotle's analysis of physiognomical signs with the remark that he might add much more of this nature did he not wish to set down the ideas of the founder of this "science," his master, "the divine Hippocrates." The quotations and comments which follow lie mainly in the field of ethnological physiognomy. He is a devoted follower of the essay on Airs. Waters and Places, dealing with the influence of physical environment on health, disease and temperament, an essay which is the earliest known work on the subject. Thus he observes, with Hippocrates, "that Asia differs very widely from Europe in the nature of all its inhabitants and all its vegetation. For everything in Asia grows to far greater beauty and size, the one region is less wild than the other, the character of its inhabitants is milder and more

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 40 1.8, 491b (trans. by D. W. Thompson). Cf. Galen, op. cit. (see note 37) 7 (Kühn 4.796).

43 A ër. 24.

gentle."41 The cause of this is the *krasis* or blending of the seasons. With regard to the lack of spirit and of courage among the inhabitants, the chief reason why Asiatics are less warlike and more gentle in character than Europeans is the uniformity of the seasons. which show no violent changes either toward heat or toward cold. but are equable. "Inhabitants of a region," maintains Galen with Hippocrates, "which is mountainous, rugged, high and [not] well watered, where the changes of seasons exhibit sharp contrasts, are likely to be of big physique, with a nature well adapted for endurance and courage, and such possess not a little wildness and ferocity. The inhabitants of hollow regions that are meadowy, stifling, with more hot than cool winds, and where the water used is hot, will be neither tall nor well-made, but inclined to be broad, fleshy and dark haired, they themselves are dark rather than fair, less subject to phlegm than to bile. Similarly bravery and endurance are not by nature part of their character but the imposition of law can produce them artificially. . . . You will discover in general assimilated to the nature of the land both the physique and characteristics of the inhabitants."42 Thus, where "the land is bare, waterless, rough, oppressed by the winter's storms and burnt by the sun, there you will see men who are hard, lean, well articulated, well braced, and hairy. Such natures will be found energetic, vigilant, stubborn, and independent in character and in temper, wild rather than tame, of more than average sharpness and intelligence in the arts, and in war of more than average courage."43 He reminds us once more that Hippocrates is a most reliable witness for the close dependence of human nature on environment and the seasons.44 And he comes back to Plato, this time to the Laws. "We must not fail to observe . . . that there is a difference in places, and that some beget better men and others worse; and we must legislate accordingly. Some places are subject to strange and fatal influences by reason of diverse winds; or again, from the character of the food given by the earth. which not only affects the bodies of men for good or evil, but produces similar results in their souls."45 Among the Scythians one man becomes a philosopher, at Athens many are such. Among the Abderites are many stupid people, but few at Athens.

 $^{^{41}}$ $A\ddot{e}r.$ 12. Cf. 5 and 16 (Hippocrates, trans. by W. H. S. Jones). Galen, op. cit. (see note 37) 8 (Kühn 4.798).

⁴² Aër. 24. Galen, op. cit. 8 (Kühn 4.802-804).

⁴⁴ Galen, op. cit. 8 (Kühn 4.805).

^{45 5.747}D (trans. by Jowett).

This work of Galen represents perhaps his most significant ideas in the field of physiognomy, his insistence on the doctrine of the humours, his ready acceptance of parallelisms in the nature and physique of men and animals, his interest in ethnological physiognomy. He is strongly Aristotelian in his belief that the besttempered (or blended) person is one who appears absolutely midway between extremes, thinness and fatness, softness and hardness, warmth and cold.46 So also in the soul the middle state is best between rashness and cowardice, slowness and recklessness, pity and envy. Such a man would be kind, affectionate, humane and prudent. He has all physical and spiritual virtues. He is always of a good color, breathing easily, he is midway between sleepiness and wakefulness, between a smooth and hairy skin, between a dark and light complexion. Elsewhere, as well as here, Galen gains Stoic support. Rightly, he concludes, does Posidonius connect with this discussion those things which appear in physiognomy. "For of animals and men as many as are broad-chested and warm-blooded are by nature in every way more given to anger, as many as are flat-hipped and cold-blooded are more cowardly. And, according to the variety of regions, the character of men differs with reference to cowardice and courage or love of pleasure and love of toil, as the motions of the soul follow the disposition of the body, which, from the atmospheric conditions is affected not a little. This is evident. since blood differs in animals by reason of heat and cold, thickness and thinness, and in not a few other respects, as Aristotle has written fully."47

Thus Galen comes to a final unified view of the relation of man to his environment, and of the humours affected by that environment which in turn react on his appearance and nature. So much of what has been quoted above has a familiar ring that it is essential always to keep in mind the fact that it is Galen who first of all skilfully combined the Aristotelian parallelisms of men and animals in the study of physiognomy with the theory of the humours circulating in the body, and thus laid the foundations for what have become commonplaces through the centuries in the interpretation of the character of a man from his physique.

⁴⁶ Mixt. 2.1 (Kühn 1.576).

⁴⁷ De plac. Hippoc. et Plat. 5.5 (Kühn 5.463-464); ed. by I. Müller (Leipzig, 1874). See F. Jacoby, Die Fragmente der griechischen Historiker (Berlin, 1926) 2 A. 102.